

PEOPLE'S DEMOCRATIC REPUBLIC OF ALGERIA  
MINISTRY OF HIGER EDUCATION AND SCIENTIFIC RESEARCH  
Abd Elhafid Boussof University - Mila



*Institute of Literature and Languages  
Department of Foreign Languages  
Branch: English*

## **Implementing Artificial Intelligence in Teaching English, Teachers' perceptions and practices**

**The Case study of Third Year EFL Learners at Mila University**

A Dissertation Submitted in Partial Fulfillment for the Requirement of the Master Degree in  
**Didactics of Foreign Languages**

**Presented by:**

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**Supervisor:**

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**Board of Examiners:**

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Supervisor: Dr. Fahima Nouichi  
Examiner : Dr. Hadjer Boukaria

2024/2023

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## Abstract

The present study explores the integration of Artificial intelligence (AI) in English language teaching (ELT). The research attempted to shed lights on the effectiveness, challenges and ethical concerns as well as teacher's perceptions and practises towards the implementation of (AI) in English language teaching and learning. This research is made of two chapters, chapter one is about literature review, benefits and challenges of implementing AI in ELT , while Chapter two, shed lights on the data collected and discussing the results.

The study reveals that the use of AI in ELT serves a wide range of benefits, including personalized learning experience, providing an instant feedback and increasing learner's engagement. However challenges such as lack of infrastructure, privacy concerns and the insufficient teacher's training stands as an obstacle to effective and successful implementation. Moreover the study highlights the significance of cultural and contextual elements in implementing AI in ELT practices. To put it in a nutshell, the researchers within the presented study underscores the capacities and potentials of AI and its role to improve English language learning experiences and outcomes, as well as focusing on the necessity of addressing associated challenges to utilize its implementation in educational manners .

**Key Words :** AI, ELT, natural language processing, Mobile assisted language learning applications .

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We are also deeply grateful to all our teachers who accompanying us through these past years .

## **Dedication**

Thank God.

**This work is dedicated to ...**

**My loving mother**, may God keep her in a good health

The kindest soul of All and my partner **Omayma**

To **Chaima** the one who without, this work would never be completed

Thank you all

## **Dedication**

This work is dedicated to My Parents and My Family

### **List of abbreviation and Acronyms**

**AI** : Artificial intelligence

**EFL** : English as a Foreign Language

**ELT** : English Language Teaching

**UNESCO** : United Nations Educational, scientific and cultural organization

**NLP** : Natural Language Processing

**MALL** : Mobile Applications for Language Learning

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## **General Introduction**

### **1. Context of the study**

After the pandemic period, traditional teaching methods were likely insufficient in terms of teaching, as well as learning especially in languages field, hence English language

On the light of these events, a new approach was released to facilitate it the learning-teaching outcomes. With this being said, technology became a key element in the process of teaching and learning. Many platforms emerge globally to support the learning process-via internet, releasing a new era of technological development in the field of education. Artificial intelligence, hence forward “AI “ is a new learning based -tool in which it offers a lot opportunities and benefits especially in the field of English learning and teaching. However, the integration of “AI” in ELT comes with a tremendous challenges and ethical issues that might hinder the integration of the latter in the field of learning English, one of these challenges is the weak infrastructure and lack of teacher’s training on how to operate AI

“AI” is considered to be of a great importance, because it creates a personalized learning experience and considered to be a time saving for teachers in their teaching process. Furthermore, it increases the learner’s engagement and keeps students motivated to learn, yet some of challenges needs to be addressed and create solutions to. The latter needs a proper infrastructure in order to work effectively, in this sense creating a strong technological backgrounds for using “AI” makes teaching and learning smooth and valuable for all learners with different levels and different circumstances. Furthermore, teacher’s lack of knowledge

on how to operate AI-based tools and systems is one the factors that hinder the implementation of AI in the educational field.

The right use of “AI” inside the classroom is significantly important for developing the speaking and listening skills, Li et al (2018) manifested that the use of AI-based listening and speaking practice tool enhanced student’s abilities in concerning listening and speaking as well. However the inexperience use of “AI” would make the learning process dull and unworthy for the majority of learners, in order to get rid of a such negative classroom experience, teachers are acquired to be knowledgeable on how to operate “AI” in EFL classrooms to assure the effectiveness of the teaching process via “AI” .

Many scholars and researchers manifested the importance of implementing “AI” in English Language Teaching, such as Bi,J & et al (2018), chen,C (2019), Li,L (2018). For its significant role in improving vocabulary, speaking, as well as listening skills.

Among the factors that could hinder the successful implementation of “AI” in ELT is the privacy and security of user’s personal data in undeveloped countries such as Algeria. Above all ethical issues like transparency and accountability problems also has an effect on the integration of such tool in language learning Respect to these issues, the learning process might affected negatively, there for it is crucial to create an adequate solutions to these issues for a proper integration of “AI” based -tool .

## **2. Literature Review**

AI technologies in education are considered to be a helpful and significant element in both teaching and learning process. The main purpose of the use of technology in education is to level up the overall knowledge and help in the process of teaching and learning, at the sametime avoiding putting pressure and compress the process of content delivery ( Popenici, 2017).

Moreover, AI has a tremendous significance in language learning field, hence English language, a numerous studies shows that AI technologies had the upper hand in developing learner's language skills.

A study done by Bi et al (2018) investigated the use of AI in language learning and found out that personalizing content according to learners needs had significantly improved student's outcomes .

Moreover through using speech recognition technologies that are supported by AI, the latter shows that it can provide a well-made speaking and listening experience resulting in developing both listening and speaking abilities. Li (2018) argued that the use of AI based speaking tools can enhance learner's speaking and listening skills

A different study that was conducted by chen (2019) in which it investigate the use of AI based language learning platforms and found that using AI in Chinese classrooms had positive impact on developing learners reading comprehension and vocabulary acquisition

Lu and wang (2019) conducted an experiment on the use of AI based\_ language learning tools and the results revealed that the consistent use of AI had an impact on enhancing student's motivation as well as engagements levels. Moreover the experiment shows that learners who use AI to learn the language were engaged more and were more satisfied than those who did not use the latter.

In terms of pronunciation, it was proven that using chatbot that was supported by AI technologies help learners to develop their pronunciation levels through providing an immediate yet effective feedbacks. Liu (2019) stated that chatbot are mimicry AI based tools that simulate and provide a dialogue that look like a real life conversation .



### **3. Statement of the problem**

The periods postpone covid19 marked the era of a tremendous development in educational technologies. The implementation of Artificial intelligence (AI) in English language teaching and learning provides exciting learning environment for English students such as a personalized learning experience, providing feedback and time saving.

Unlike AI\_ features, traditional teaching methods failed to provide a personalized learning experience that goes hand in hand with divers proficiency levels and learning styles of students. The existence of such inadequacy decreases the optimal engagement and progression in learning English as a second language (ESL). In addition the lack of adaptive assessment process and instant feedback can hinder the development of the necessary language skills of learners. On the lights of these findings, there was a pressing need to explore, and integrate AI\_ powered tools within the field of English language teaching in order to improve the learning experience and provide an instant constructive feedback for students. The aim is to bridge the gap in-between AI technology and effective language teaching, resolving in better outcomes in English language proficiency. It is crucial to explore the hidden potentials of AI\_ tools in the field of languages for providing a more interactive and effective educational atmosphere.

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

**The present study aims at :**

1. Showing the benefits of implementing Artificial intelligence in the field of English language teaching and learning.
2. Exploring the challenges that might hinder the integration of “AI” in education.
3. Investigating teachers’ perceptions and practices towards the implementation and the use of “AI” in education.

## **5. Research Questions**

**The current study aims at addressing the following questions :**

1. Are there any advantages of integrating “AI” in English language teaching and learning?
2. What are the challenges if there is any that may stand as an obstacle in the face of implementing “AI” in the educational field ?
3. How can Artificial intelligence be used ethically in English language and education as a whole?
4. What are teachers perceptions and practices towards the implementation of “AI” in language teaching ?
5. Does using AI to learn English help students enhancing their language skills?

## **6. Research Methodology**

In order to answer the research questions, two research methods were used by researchers in this study ( the qualitative and quantitative ) they are adopted to provide a clear data analysis and meet the research aims. First a questionnaire is delivered to a sample of English Language license students about the use of Artificial intelligence for learning English. Second is teacher’s interview to be answered by university teachers .

Data obtained will be analysed quantitatively and qualitatively in order to find answers for the search questions and shed lights on the importance of implementing AI in language teaching field and educational field as a whole.

## **7. Structure of the study**

The present dissertation is made up of two chapters, the first chapter is devoted to the theoretical part. It is concerned with literature review. The second chapter on the other hand is devoted to the practical part, it explains the research methodology and tools to be implemented, provides the analysis and discussions on the findings, caring recommendations and suggestions.

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# **Chapter one**

## **Theoretical overview**

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## **Chapter one**

### **Section one**

#### **Theoretical overview**

##### **Introduction**

The present chapter offers an overview about Artificial intelligence, hence “AI” it aims at discussing a verity of frame work. It is divided into two parts. The first part introduce “AI” its definition, Types of “AI” based-tool and the significant of implementing “AI” in English Language field. The second part, presents the different challenges that may stand as a barrier in the way of integrating “AI” in education and the ethical issues that co-exist with these challenges, as well as the ethical principles that govern the proper use of “AI” in EFL classrooms.

##### **1. Implementing Artificial intelligence in English Teaching**

Artificial intelligence can be defined in many ways based on different point of views of scholars, researchers and AI developers themselves

###### **1.1. Definition**

The term “Artificial intelligence “ was brought up back in 1956by John McCarthy in which he states that computers will one day be able to simulate human’s cognitive function. Furthermore, pokrivcakova( 2019) defines AI as a technological tools in which they will have the capacity to operate and think like humans.

Artificial intelligence is a system that is designed to mimic human intelligence and do various chores which humans can do. In other words “the automation of activities that we associate with human thinking, activities such as decision making, problem solving and learning...”.(Bellman,1978).

## **1.2. Types of AI language learning tools**

There are different types of “AI” language learning tools which are available for learners worldwide, each one has its own features and approaches.

### **1.2.1. Adaptive learning platforms**

These tools use “AI” algorithms to make the learning process adequate and adaptable to the user’s proficiency level and learning styles, what these tools offer is a personalized lessons and exercises suits each learner individually, taking in consideration the fact that each learner has a different background, different cultural aspects, as well as different point of view. Snowwalker (2005) stated that adaptive learning platforms permit the content to be more organized. Moreover, these systems defines the ways to learn based on learner’s knowledge and use results that are extracted from student’s assessments in order to provide a personalized constructive feedback to each and every student .

### **1.2.2. Language exchange tools**

Language exchange tools are platforms that connect users with native speakers of the specific language they want to learn. Through this process language exchange can be facilitated, the role of AI in this process is it matches users based on their language interests, availability and proficiency level, with this being said this step of connecting speakers of languages with natives, not just help to learn the target language but also it connect different people with a different cultural background and bring them together under one umbrella, resolving in sharing ideas, feelings, different political and philosophical point of views .

For instance research has shown that apps like E- tandem language learning app offers a lot of help and benefits for those who wants to learn a different language other than their mother tongue (appel & mullen, 2000) have stated that E-tandem join two individuals who’s having two different languages from each other and both of them learn the target language they want

using various online means, what this process results in is encouraging engagement and autonomous learning

### **1.2.3. Language Tutoring Chabot**

Chabot that are powered by “AI” provide tutoring through voice dialogue, it present a simulation to a real-life conversation, in this sense they can answer questions and offer feedbacks on pronunciation and grammar mistakes (Liu et al,2019). Furthermore Noviyanti (2020) manifested that using AI-pronunciation checker tool in language learning, indicated that student’s pronunciation was enhanced by the time they use AI-powered tool, respect to this Chabot can be used as guide to develop one’s language taking in consideration that AI Chabot would focus more on enhancing learner’s pronunciation and grammatical mistakes such as verb conjugation, resulting in a better learning outcomes .

### **1.2.4. Speech Recognition platforms**

Speech recognition apps that run by “AI” technology offer a speaking practice and pronunciation for users, these apps analyse participant’s speech patterns and provide a constructive feedback to help them improve fluency and pronunciation, with this being said these platforms analyse learner’s voice and word’s stress, then provide a constructive point of view to help the learners develop more in their pronunciation. Moreover, pronunciation is a vital element in order to speak proper English and to be understood by others. ( Begum,2016) stated that, the sole purpose of mastering pronunciation by learners is that they can pronounce words as accurate as natives does, and they can be understood by the other individuals. Safely to say that using a speech recognition platform is necessary process to master one of key elements in any spoke language.

### **1.2.5. Grammar and vocabulary**

Like most apps that teach languages, AI powered apps focus on teaching grammar rules, sentence structure as well as vocabulary content through games and quizzes, the difference about these grammar and vocabulary applications that are powered by AI is that they use natural language processing, hence (NLP) algorithms to analyse and generate language content, what can be concluded is that natural language processing is a key foundation for operating an AI\_ powered tool that focus on grammar teaching as well as the vocabulary, in this manner it can be said that these AI will soon have the ability to generate the language they are programmed to teach. Ghufon (2018) stated that using grammarly is considered to be beneficial for teachers and learners because it decreases the writing mistakes as well as vocabulary errors.

In addition to these platforms that are powered by “AI” in the field of language learning there is also AI translation based -tools, which they translate texts between different languages, a leading example of this is

### **1.2.6. Microsoft Translator**

It employs “AI” technology such as statistical machine translation as well as neural machine translation to translate different texts, speech through multiple languages. Translation apps are significantly useful for language learners with different degrees of English proficiency because it enables them to communicate in a better way ( Choi, 2015).

## **1.3. Four Examples of applications that use “AI” algorithms**

1. There are a various apps out there use AI technology for enhancing the language learning process and they categorized according to specific features, in this sense there are apps that use “AI” to personalized language learning experience for participant, providing a tailored language lessons according to individual’s preferences and learning styles such as Duolingo,



Babbel, Roseta stone and lingodeer. The key goal out of these apps is to go across all the lessons and improve one's skills to master the target language hence, English. Krashan (2014) manifested that the obvious aim of these apps is the conscious learning, however in various times a subconscious acquisition of the performed language will take a place inevitably as learners hear and read samples of the wanted language, what this mean is that learning the target language through apps will enable the learner to evolve in grammar mostly, however the language itself can take place through the acquisition process that happened subconsciously taking in consideration the fact that learners are being consistent with their learning process.

2. On the other hand language exchange apps such as Tandem, Hello talk and speaky, were designed to connect its participants to native speakers of the specific language they want to learn these applications are also known as “Mobile assisted language learning applications “ hence MALL, the primarily function of these apps is providing a supportive cooperation learning experience through connecting users with their peers and native speakers, which eventually have improved the learner's ability to an authentic communication and cultural exchange ( Chinnery, 2006).Like it was mentioned before the use of language exchange apps bring language learners closer, connecting in between them through shared ideas and cultural perspectives leading to create what is known as intercultural communication, in this sense both learner of the target language and native speakers will understand each other from a different point of views, seeing their cultural differences and similarities, eventually accepting what is different about each other.

3. Tutoring Chabot such like, Elsa speak, Busu, and mondly, are used to practice language by users through providing texts or voice conversations, in respect to this chatbots are an artificial intelligence-powered virtual assistants in which they were fabricated to mimic an actual-real conversation with language learners (Liu et al.,2019).With this being said, it is

necessary to understand significant of these Chabot tools for its time conservative and being totally free

4. Lastly grammar and vocabulary apps like Grammarly, Drops and fluentU, were applying “AI” technology to teach grammar rules for users as well as vocabulary and structures of sentences, Furthermore grammarly is building block for improving writing skills. Within the Indonesian’s teaching field, teachers applied grammarly as as an automated based-app to evaluate learner’s writing and provide feedback as well.( Ghufron, 2019). In respect to this grammarly can be considered as a tool to evaluate learner’s proficiency skill in terms of writing essays as well as be used as a guide to improve learner’s sentence structure.

#### **1.4. The benefits and advantages of integrating “AI” technology in EFL teaching and learning**

There are a several benefits for implementing “AI” based- tool for language learning :

##### **1.4.1. Efficiency and speed of learning**

As the name reflect the meaning, integrating an AI language learning tool in English learning can significantly assist learners automating specific tasks in order to save time, it also provided a personalized learning experience depending on their needs and progression pace (Xie et al, 2019, as cited in Robelleo, 2023). Not to mentioned proposing an immediate feedback in order to help students developing their skills fast. Above all, it provide the perk of time saving which means that learners are able to grasp as much language as they can in short amount of time.

##### **1.4.2. Personalized learning experience**

Through using a sophisticated algorithms to track learner’s progress, “AI” language learning tool could adapt learning materials to meet specific needs of student’s. This act made the learning experience more engaging and concrete, as learners are exposed to

materials in which they suits their learning styles and pace of learning ( Kesseler, 2018).personalizing learning experience is a significant addition to English learning, it allows students to go step by step in their learning process making sure that their learning needs and learning objectives are being fulfilled thought the entire process

### **1.4.3. Improved speaking and listening skills**

Fabricio (2023) stated that technology used by AI could as well support the enhancement of both speaking and listening skills of learners. speech recognition technologies, could significantly provide an instant feedback on intonation and pronunciation, which allow learners to practice and improve their skills. Li (2018) manifested that the use of AI-based speaking and listening tools had improved learner's both listening and speaking capacities. In this sense, it shows that while using AI tools to learn English both of speaking and listening skills of students will be developed substantially due to AI features of providing a semi- live conversation and proposing spoken answers to their questions.

### **1.4.4. Increase learner's engagement**

one of the hardest processes a teacher does inside the classroom is making students engaged with the lessons. Using AI-based language learning tools in EFL classrooms, can help keeping students engaged and motivated to continue learning( Johnstone,2005). It was proved that the engagement and motivation of learners has increased in language learning gradually, through using AI language learning games and other interactive learning features. Furthermore the use of language learning games that are directly linked and operated by AI-based adaptive feedback made students more involved and motivated with the game then with traditional language -learning materials.( Iawsaki et al, 2019, as cited in Fabricio & Alvarado, 2023). In this respect it is important to understand that one of the ways to make a learner engaged in the lessons is by providing a stimulation and reward, using Artificial intelligence system would provide an engagement experience in terms of learning, through

using a game of questions about the target language the more the learner answer questions the more points he has, the more stages he gets to unlock, in terms of motivation it keeps him motivated and alert to learn everyday.

#### **1.4.5. Increasing the fluency and accuracy in pronunciation using AI chatbots**

Fluency is often refers to as the ability of talking in a smooth way using a consistent rhythm and correct articulation of sounds in a controlled pace of speech which enable the listener to adjust and comprehend more words and ideas easily (Derwing,2015).

Using chatbot AI has proved to be effective in developing student's vocabulary and pronunciation. Hong(2023) stated that a new chatbot refer to as "MissionFluent" is an AI-powered tool that focus on the idea of enhancing English pronunciation skills by providing exercises that are directed to enhance learner's pronunciation. through the use of "MissonFluent tool" language learners can rehearse articulating sounds in more accurate way, allowing them to enhance their phonetics patterns as well as intonation in English language, this approach of using "MissionFluent" is basically directed to develop learner's speaking skills along with putting an emphasize on developing pronunciation abilities.

#### **1.4.6. Accessibility and opportunities**

AI-learning tools have the necessary capacity to provide a learning opportunities for learners with disabilities (Morris, 2020). The point behind this approach is to provide an equal learning environment for all learners with different circumstances and different situation, learners of all ages, cultural background and medical history can access to AI tools and have a fair share opportunity to engage with the learning process.

#### **1.4.7. Improved learning outcomes**

merging AI technology with the traditional teaching methods allow EFLteachers to create a suitable and efficient learning atmosphere for learners which eventually resolve in

improving learning outcomes (Almurtadha,2019 as cited in Robelledo,2023). The basic idea of this collaboration is to facilitate learning for students and assuring that the outcomes would be positive in divers aspects.

#### **1.4.8. Cultural exposure**

Robelloedo( 2023) manifested that while interaction with lessons provided by AI language learning tools and real life scenarios proved to be beneficial in manner of learning the target language, it is also be possible that through these lessons that learners can be introduce to a different cultural elements such as customs, traditions as well as social norms, this can assist students to gain a better understanding and appreciation of other cultures across different countries, keeping in mind that there will be no language learning without cultural understanding, the comprehension of culture is a crucial factor for the learner to master any language around the globe.

### **1.5. Future enhancement In AI Language Learning Tools**

**There are a various potential enhancement within AI language learning tools that are worth-taking in consideration**

#### **Implementation with a virtual reality and augmented reality:**

The integration of virtual reality (VR) as well as augmented reality (AR) technologies in combination with AI-powered learning tools gives EFL learners an exciting learning experience (blyth,2018, as cited in Robelledo, 2023). A famous example of that is the use of VR to simulate an actual-live scenarios, in this way learners can practice and enhance their language skills in a realistic way (Al-Gindy et al 2020) on the other hand AR could offer a real- time translation in the actual world ( Robelledo, 2023). What this mean is that using a sophisticated AI technologies to connect users to a virtual reality in order to help them learn and understand a different languages, learning new skills...ETC a live example of this

approach is “Apple virtual reality glasses” that enable its users to access to different assignment at the same time, the user can learn English and interact with AI system while doing his daily chores.

### **Enhancement in natural language processing capabilities :**

The development in the natural language processing (NLP) goes hand in hand with the development of more sophisticated AI language tool, this would lead to have the ability to comprehend and produce language, not to mentioned the ability to recognize errors and respond to them by correcting them more accurately (Araya, 2023). In this sense improving natural language processing is a crucial element in order for AI system to be developed more and generate more language of his own.

### **Advancement in personalized learning experience:**

When the algorithms that support personalized learning experience are developed, it gives AI language learning tools a starting point to offer a more tailored and practical learning experience for learners, this would resolve in adjusting to student’s learning styles and needs (Ismail, 2016). Meaning of this is that the more algorithms are developed the more content will be tailored according to learner’s needs, goals and objectives.

### **Increased focus on language for specific purpose:**

Guo(2020) argue that in the near future AI language learning tools would be more of specialize for a certain industries such as language learning for business or medical professions. in this sense this would lead to an enhancement in targeted and more efficient language learning resources for these previous mentioned professions and enterprises, opening the door for a more tailored language for different fields and professions.

## **Chapter one**

### **Section Two**

#### **Challenges, Ethical issues and ethical principles of Integrating Artificial intelligence in English language learning field**

##### **1. Challenges of implementing Artificial intelligence in teaching and learning English**

It is unquestionable that “AI” technologies could be used to make changes in the near future for instance developing a suitable and more enhanced algorithms in order to process natural language and creating an adaptive learning process that suits all learners.

However with the significant attention in which Artificial intelligence has gained in the last few years for its capacities, a cloud of challenges rise up as an obstacles in which it could have a negative impact on the integration of the latter in the field of education, not to mentioned its implementation in EFL classrooms, would be insufficient due to the following factors

##### **1.1. Limited human interaction**

According to Khanzode & Sarode( 2020) the absence of human interaction is the most effective constraint on Artificial intelligence, while other services provide the opportunity to practise live conversation with native speakers, artificial intelligence does not provide human connection instead using the latter is considered a self-guided experience, which can be a problematic for learners who prefer face to face interaction with teachers, in this sense the human interaction has a massive significance on developing learner’s language, it is also a crucial to consider that the connection between mentors and their mentees is inevitable for mastering language skills completely.

### **1.2. Limited ability to recognize errors**

Artificial intelligence learning systems may not be as experienced with faults as human teachers are, nor may they be able to identify them or correct them accurately. As a result, students may form a negative habit of making repeated mistakes (Rebbeolledo, 2023). What this mean is that AI systems though having a significant amount of language data that can be used as a base for presenting language content, however AI capacity of analysing and recognizing errors is limited. The recognition of difficult errors made by learners is a human perk specifically linguists who has been doing researches on constructive analyses approach and errors analyses approach, in respect the limitation of AI systems of recognizing and correcting errors will continue to exist unless linguists across the world help in the development of AI features.

### **1.3. Teacher's lack of competencies**

The lack of capacities in terms of using Artificial intelligence in teaching appears in underdeveloped countries like Africa and south America, a study done by Manzo & perez-sabater (2021) examined the implementation of Artificial intelligence tools into English language education in Colombia, to investigate the challenges, as well as the opportunities that has a direct connection with the use of "AI" in the field of language teaching hence English ,the study found that there is a growing interest in using Artificial intelligence in language education in Colombia, however there are also significant challenges that rise up at the horizon in which they are associated with the implementation of "AI" including the limited teacher training on the use of Artificial intelligence and also there were concerns in terms of privacy and data security, in this manner it is crucial not just for the teachers to learn some digital skills to use Artificial intelligence in pedagogical environment, but it is also significantly important for the artificial intelligence developers to learn and understand how



teachers operate inside the classroom and create solutions that are sustainable in real\_ life situations (Pedro et al, 2019).

Furthermore, based on a research by Abalkheel( 2021 )on the use of "AI" in Saudi Arabia educational system, which was supported by Ja'ashan (2020). It was crucial to implement a new teaching and learning methods during the epidemic phase, however some educators in Saudi Arabia thought that face -to face interaction had a positive impact on student's learning outcomes, also it is because teachers were reluctant to use technology inside the classroom (Gulnaz et al, 2021). Based on these results , it was set that low self - efficacy is another challenge preventing Saudi EFL educators from reacting positively to these unexpected teaching alternatives during the pandemic ( Rahman ,2020) . Moreover, within the research it was argued that Saudi educators have insufficient training on teaching and learning strategies about online learning-based tools such as "AI", therefore it was a problematic matter to use "AI"-powered tools in EFL classrooms ( Abalkheel, 2021). Up to this point it is proved that teacher's incompetence's is a major challenge that would hinder the effective integration of AI.

#### **1.4. Lack of infrastructure to support AI -based technology in schools and universities**

weak infrastructure can also be a major challenge, without the appropriate technology and the facilitation of internet access or the adequate hardware it will be very challenging for these underdeveloped countries to integrate" AI" in EFL classrooms, not to mentioned the entire educational system it self, the lack of infrastructure and the inappropriate technology can decreases the effectiveness of AI integration in ELT and educational system as a whole (OECD, 2015). Furthermore there have been concerns that the use of AI technologies could take over the teacher's role, leading to a loss of human interaction and the loss of ability to provide emotional support to students ( Razzaq et al,2019). What can be said is that the appropriate technological development is being significantly important for the successfulness

of AI implementation in language teaching and learning, with this being said teacher's role inside the classroom is something must, even with the existence of AI tools it is important to have a teacher as guide and also to create a communicative and supportive atmosphere with students inside the classroom.

### **1.5. Data and privacy breaches**

The latter stands as a significant challenge that setback the implementation of Artificial intelligence in language teaching and learning. In order to maximize the learning experience, using "AI" in education demands collecting a vast amount of personal data, that must be optimized and utilized ( Tzimas ,2021. As cited in pardo & simense 2014).in this sense the personal data of both teachers and learners might be at the risk of privacy breaches, example of that, in order to personalized educational experience, privet information of students about learning and performance are accumulated and utilized for future prediction, however this might be considered against the will of learners ( li,2007). In this respect learner's data might be put at the risk of being breached, not to mentioned that storing personal data and information for future prediction rises an ethical privacy issues especially if the storage process of personal data is against the learner's approval.

One of the most controversial challenge is about ethics and transparency in data collection. Artificial intelligence integration sheds lights on many ethical concerns in terms of accessing to educational system, personal data privacy, liability, impact on work and ownership of data. In this sense Artificial intelligence regulation will demands public discussion on ethics, transparency and security ( Pedro et al, 2019). Being said, it is crucial to take into account the negative side of sharing privet data when using AI in education, especially that within the academic walls there are learner's, teachers and administrators who doesn't want their personal information to be taken, sold or being breached by cybercriminals and be shared worldwide for this reason it is important to be aware that with the

implementation of AI a responsibility of protecting personal data is being expected from AI system developers and public authorities.

## **2. The different Ethical issues of implementing Artificial intelligence in English Language Learning and Teaching**

When talking about the use of Artificial intelligence in EFL classrooms, its not just about the benefits and the challenges that rise up with it, however using such a revolutionary tool, put some ethical issues on the way, not just for the users of Artificial intelligence. these issues also effects researchers and practitioners who are directly connected and involved in associated activities and systems of such kind (Kay& Kummerfeld, 2019). With this being said ethical concerns play a significant role when using” AI”.

According to Rebelleodo( 2023) Ethical considerations must be kept up in mind while using Artificial intelligence in language learning, this include human connection and accessibility. Human interaction is something essential in language learning and teaching , Artificial intelligence should be a complementary tool for the teachers inside the classroom and not a life time alternative. In respect to this it is unethical to consider an AI program a replacement for an actual language tutor.

In terms of accessibility, it is essential to understand that not all students and learners has a fair and equal chance to access internet hence AI technology, in this sense it is unethical act not to take the learner’s needs and the accessibility to the technological resources ,this matter of accessibility could rise an ethical dilemma in manner of integrating AI in education, specifically language teaching and learning (Rebolledo,2023)

Within education Artificial intelligence holds an ethical entanglement as well as privacy concerns, which demands a critical attention between” doing things ethically and doing ethical things”(Holms et al, 2021). With this being said it is necessary and wise to take in consideration that Artificial intelligence should be work with ethically and to considerate it

more of a responsibility especially in the field of language learning, the ethical risks that the latter carries about privacy and safety is considered to be massive and needs to be set under control, the unethical use of AI tool can have a significantly negative impact on both learners and researchers. According to Russelle & norvig,(2022) researchers across the world ought to take in consideration an ethical inclusion of their work(P,1020).

The integration of AI in ELT draw a lot of ethical concerns and unanswered questions, it is important to govern the personal information of language learners and make sure it is being secure and can not be shared with anyone without their consent. This includes, language proficiency levels and progressed as well as their learning styles(Robeolledo, 2023).

### **2.1. Bias and fairness issue**

Rebolledo (2023) argued that In many times AI algorithms potentially magnify language learning materials as well as teaching practises. In this sense these biases can be ethically unfair and non-equitable for all learners, partiality problem is considered to be a major ethical issue that need to be looked at by AI developers, the nowadays algorithms provide an advanced materials in which learner cannot deal with, this will eventually lead to learner's inability to deal with such a magnified language content.

### **2.2. The transparency problem**

AI Learning -powered tools are not transparent enough on the way they operate in concerning the use of learner's data. Based on this AI-powered tools may have a discrimination against learners from different racial groups, communities and cultures which will lead to violate the inclusiveness of education ( De Cremer & De Schutter,2021, as cited in Dietvorst et al.,2018). Transparency is crucial concept when integrating AI in language learning and the reason behind that is a lot of learners across the world will be connected to a one server in order to learn, in this sense it is essential to guarantee that the learning process is being transparent, for all learners despite their racial and cultural differences.

### **2.3. Intellectual property issue**

It is also a matter of an issue that AI programs often create outputs of their own, in this respect there can be issues of ownership of these materials, above all the use of copyrighted materials may have an effect on intellectual property rights, this rising issue is something that should be shed lights on especially in a world that manifested the use of Artificial intelligence technology on a wide range. Understanding copyright law in the dawn of Artificial intelligence is becoming a necessary matter, AI systems carries on, creating content in various industries, the law and rules of copyrights only exist to protect the legal rights of content makers, giving them full guarantee over their genuine works, but with the rise up of AI there was complexities in terms of determine ownership of AI-generated works(Ray Kurzweil,2009).

### **2.4. Incorporating of Data and privacy matters**

The latter can be a serious ethical problem, this include data collection, restricted availability of data sources, biases, data ownership and control and data autonomy ( Akgun et al 2021).data incorporating is a crucial process in order to fully comprehend the principles and values of data usage before making ethical decisions and being alert of unexpected outcomes in education. What this mean is that before any process of gathering data it is significantly important to take into account the fact that data must be comprehend and be understood before its being collected and stored.

Although the implementation of AI in education, offers a lot of benefits, however with the upcoming challenges and the unethical use of it. A need for an Ethical uses of artificial intelligence in terms of education is critically demandable, these ethical principles works as a guide line to govern the most efficient use of Artificial intelligence in an ethical terms. (Nigam et al.,2021, Berndet et al, 2020; Hagendorff et al, 2020)declared that it is necessary to empower and emphasise on setting an ethical guidelines for AI programs to work side by side

with societal values. Going through safeguard measures is being required to see how these AI programs are designed and how they function and evolve.

### **3. Ethical principles for implementing Artificial intelligence in education**

#### **3.1. Principle of transparency and accountability**

Artificial intelligence tools have been in service extensively in education for the sake of enhancing learning and teaching practices (Wang & Cheng, 2021). However, the ethical challenge of transparency of the generated data is still unaddressed. Cope & Kalantzis (2019) declared that this ethical principle is highly significant for both teachers and learners as these data visualizations represent the student behaviour and their evolving process, it is ought to be noted that the transparency policy itself lies in what data is?, where is it collected? and what happened to it? and most importantly how is it going to be worked with? (Digital Curation Center, 2020). These questions can be answered once data ownership and accessibility are ensured, when data are sustained the principle of transparency is being reached and achieved successfully, furthermore transparency principle in data and algorithms can be defined as the process of collecting, analysing of the data, reporting data should be transparent with informed consent and clarity of data ownership, accessibility and the purpose for how data will be used, in this sense the AI algorithms should be explainable and justifiable for specific educational purposes (Andy Nguyen et al., 2023). It has been highlighted in multiple ethical guidelines that the transparency principle in using AI in education is considered to be a crucial matter in well-known parties this includes the European Commission's ethics guidelines for trustworthy AI (2019). European Parliament (2021), UNESCO Education & AI (Mio et al., 2021). As well as Beijing Consensus UNESCO (2019), and OECD's principles for a responsible superintends of trustworthy AI (2021). As well as the European Commission (2019) all of them stating and agreeing that the principle of Transparency is significantly important in manner of using AI in English language learning.

### **3.2. Principale of privacy**

privacy is an ethical issues that face the integration of AI in education, privacy can be define as “ the right to be left alone” in this respect it resonate with the fact of having privet and sensitive information being secured and protected ( Muller, 2020).

To secure and support learner’s privacy and social well-being while learning, it is crucial for AI developers to understand and assess the point of views of both teachers and learners to decide how AI should be integrated within the classroom environment (Miao et al.,2021). In this sense both developers and tutors should adopt transparency as well as visibility. The goal behind this is to plant create trust bridges among learners to provide them with an insight to level up their skills all over the context while maintaining the control over their data and digital identities ( Jobin et al.,2019).

Integrating AI-based tools in teaching and learning activities is about users sharing their own personal information in order to go from one learning process to another smoothly, participants are assumed to give consent by agreeing on terms of use and how their personal data is being collected and processed, in this respect, consent must be well transmitted as a pragmatic approach in order to build trust between students and teachers, since sharing their own privet data, shows they are at ease with the use of their own personal information by their own tutors to improve their own learning performance (Li et al, 2021, as cited in Sedenberg & Hoffmann, 2016).

### **3.3. Principle of security and safety**

Integrating AI in language teaching system require collection data of users , these data can make predictions about the learning behaviours and performance of learner’s. However data can be manipulated or corrupted by cybercriminals, according to this, the principle of security should be design and integrated in a way which ensures that safety and security is

effective enough to protect data from cybercrimes as well as data breaches and corruption threats. Making sure that sensitive information are secure and safe.

As for the safety measures it should be revolve around a system that is designed, developed and integrated through the approach of a risk-management, so that users are well protected from harm and fatalities ( Andy Nguyen,2022).

Developers should take in consideration both safety and security of participants and their data as well as to care about manufacturing , practising and testing AI tools to ensure the safety use of AI systems ( Leslie,2019) with this being said, all parties that are included in the process of integrating AI in the educational field including tutors, developers and public authorities ought to establish an appropriate mechanism to ensure the accountability and transparency throughout the AI lifecycle(AHEG,2020). The sole purpose behind this is to create detailed guidelines and ensure that AI users receives proper training in order to operate the system safely within the classroom and the educational environment as a whole.

#### **4. Ways that enable foreign language teachers to be prepared to deal with the implementation of “AI” powered tools into their teaching :**

Artificial intelligence offer a significant benefits for EFL learners, however for some teachers it might cause a challenge to implement such a powerful tool in education, some of these challenges are factors such as lack of equipment, insufficient technical support, lack of knowledge and insufficient skills and fear of losing their roles as a teachers is one of the internal factors ( pokrivicakova, 2019 as cited in INTERNATIONAL KTUDELL CONFERENCE, language , literature and translation)

The following points are ways to help teachers to be prepared for integrating “AI” in language teaching and learning.



### **Professional development :**

According to Nazaretsky et al (2022) creating and submitting professional opportunities for the overall technological enhancement such as courses and seminars is crucial as well as helpful for foreign language teachers to get to learn about multiple AI-based tools and how to implementing them effectively into their teaching .

### **Mentorship:**

A better approach for teachers especially novice ones to learn how to operate an AI-powered tools and engage them in their lessons is by experienced teachers sharing their knowledge about using “AI” technology with these inexperienced tutors. Experienced teachers can transmit their expertise, knowledge and point of views about the use of AI-powered tools with their mentees and guide them through the process of integrating AI \_ powered tools effectively in the field of language learning and teaching(Pedro et al,2019).

### **support and guidance :**

integrating AI technology in language learning field can be a challenging, there for teachers in order to be at ease with using such a new technology and get the best out of it they need to get guided and most important get to be supported through the entire process of implementing “AI” in language learning field , this can be achieved through providing technical support, offering feedback and answering questions asked by teachers themselves. By using these approaches, teachers of foreign languages can engage and be fully prepared with the use of AI technology.( Pokrivcakova, 2020).

## **Conclusion**

On a broad scope, teaching and learning English is considered to be of a great significance matter in nowadays world, through using English language, learners will be able to communicate their ideas and cultural views worldwide. The more they involve with learning the language the more they were able to communicate with their peers and people from a different cultural background who speaks English. However when it comes to the teaching and learning this specific language, both teachers and learners face some difficulties, due to the fact that traditional teaching methods do not provide a personalized learning experience, moreover, neglecting the fact of providing an instant feedback for learners, which considered to be a necessary step to achieve the level of proficiency they are acquired to fulfil. As a result when learners hit a Plato, they lose interest and motivation to continue learning the language. In order to overcome these difficulties, integrating artificial intelligence as a helping tool for learning and teaching English have been strongly suggested to enhance English teaching process in EFL classrooms as well as ameliorate the learning outcomes and improve learners proficiency by offering an immediate feedback, error's instant correction and providing a personalized learning environment that is tailored to all students from a different backgrounds.

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## **Chapter Two**

### **Field work**

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## **Chapter two:**

### **Field work**

#### **Data Analysis and Interpretation**

##### **Introduction**

This chapter explains the way in which the present study is designed . demonstrating the methodology used for data collection and analysis. To start with it display a description of the population and the sample of the research, then it describes the means and the instruments used in this research. It also shed lights on the approach used to collect data, directly followed by a description of each questionnaire's section. Moreover, it represents the analysis of the gathered data and discussion of the findings. In addition it highlighted the main results obtained, and find answers to research questions through the statistical analysis, at the end some recommendations and solutions are proposed.

##### **1. Methodology**

###### **1.1. Sample of the study**

The population of the present study is a 3<sup>rd</sup> year English language students as well as decent amount of English teachers. The sample includes a twenty\_ seven students and ten teachers who teach English language. The researchers adopted a proportional random sampling, both samples will be questioned and interviewed to explore how far the integration

of Artificial intelligence into English teaching and learning is significance in developing learner's proficiency of the language .

## **1.2. Research Approach**

The following research work will be conducted based on the qualitative and quantitative approach, as it aims to explore the significance, benefits, challenges and the ethical issues of implementing AI in English teaching and learning as well as investigating teachers perceptions and practices towards the integration of the latter by using numbers and statistics to explore and analyse the findings .

## **1.3. Research Tools**

Within the present study the researchers adopted two main research tools :first, a Questionnaire which was handmade and administrated to third year English students. Second is an interview that was conducted for English Teachers . Brown (2004) defines a questionnaire saying that “ a questionnaire is any written instrument that present respondent with a series of questions or statements to which they are to react either by writing out their answers or selecting among existing answers .”

The present questionnaire is made up of a fifteen questions devoted to third year English learners as well as an interview that was conducted by researchers and devoted for English teachers. In this manner the questionnaire was answered by the sample of twenty-seven learners (27) of English language, while the interview was conducted with ten (10) of university English teachers .

To begin with, Students' Questionnaire contains 4 sections

Section One deals with general information it contains 5 questions (1\_ 5) designed to collect some information about the participants .

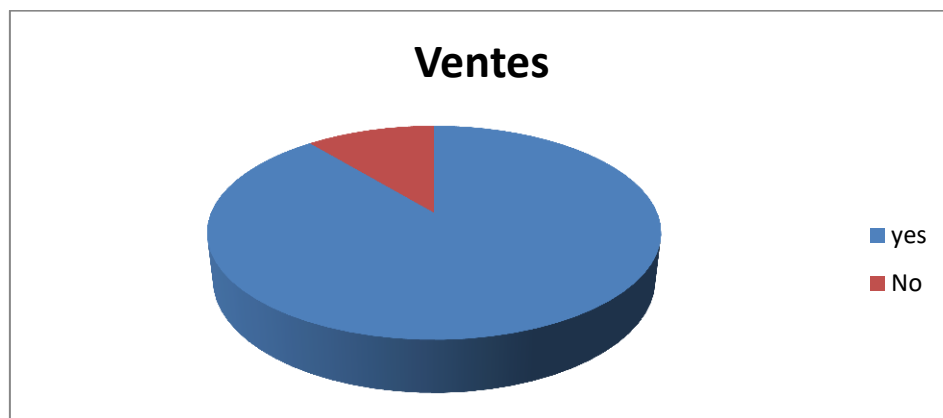
Section Two is devoted for students' experience with using AI tools, the latter also contains five questions (6\_ 10) it seeks to discover if learners ever used AI based applications in their daily lives to improve their language proficiency.

Section Three, deals with students' attitudes while using AI applications, it contains four questions (11\_ 14) it aims to discover students' aspects and attitudes on the use of AI .

Section Four was all about the future recommendations on the use of AI, it contains only one question (15).

### 1.3.1. Section one: General information

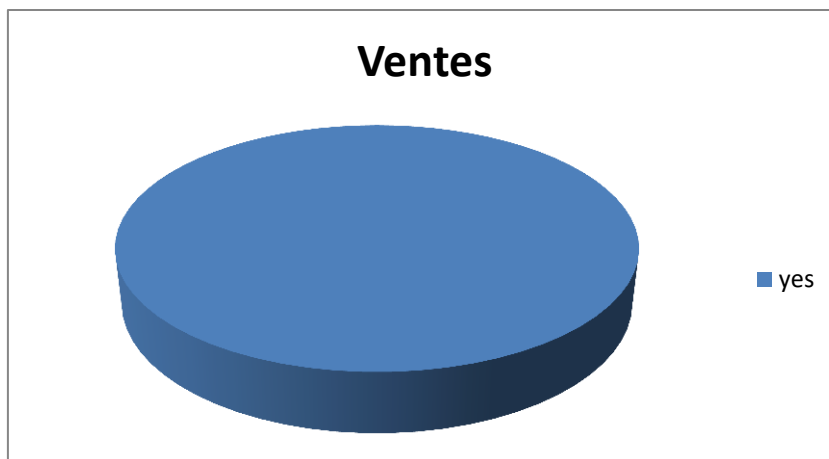
**Q1: Do you choose to study English ?**



**Figure 1 : Student's choice of studying English**

According to the results presented in figure 1, it shows that 89% of participants choose willingly to study English, while 11% did not choose the latter, the results indicates that those who choose to study the language are being more interested in it than those who did not choose .

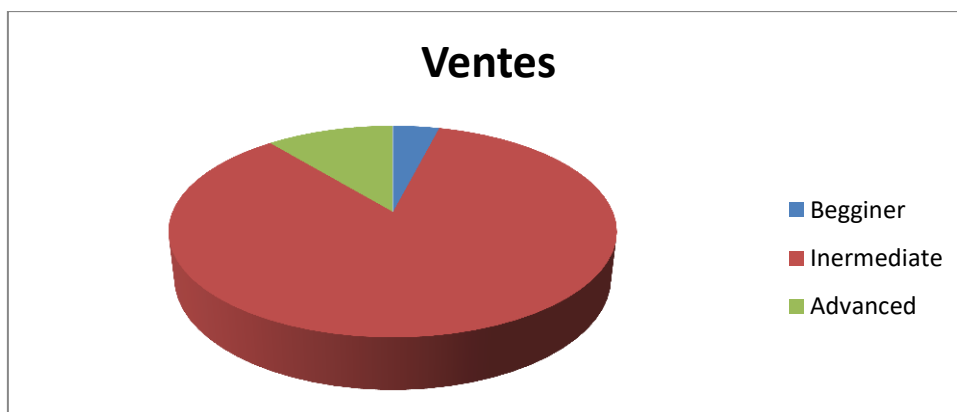
**Q 2: Do you enjoy learning English ?**



**Figure 2 : Learners preferences of learning English**

The results in figure 2 indicates that the entire supplement of learners enjoy learning English, and the reason behind it is that after getting familiar with the language they start to enjoy practicing it .

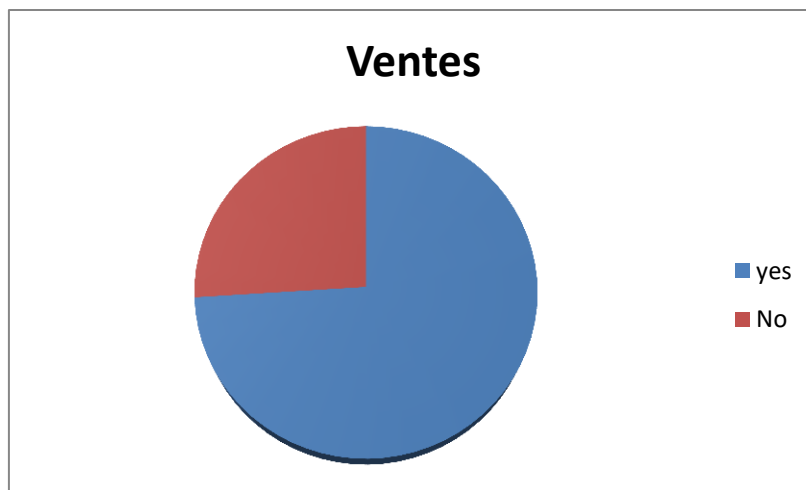
**Q 3 : How do you evaluate yourself in English ?**



**Figure 3 : Learners opinion about their level in English**

The results shows that 85% of participants holds an intermediate level in English, while 11% are told to be Advanced, on the other hand only 4 % are considered to be beginners.

**Q 4 : Do you use AI based tools or applications to improve your level in English ?**



**Figure 4 : Student's use of AI Applications**

Figure 4 shows that 74% are positively use AI applications during learning English, on the other hand 11% do not use the pervious mentioned tools.

**Q 5 : How would you rate your level of proficiency in operating AI applications ?**



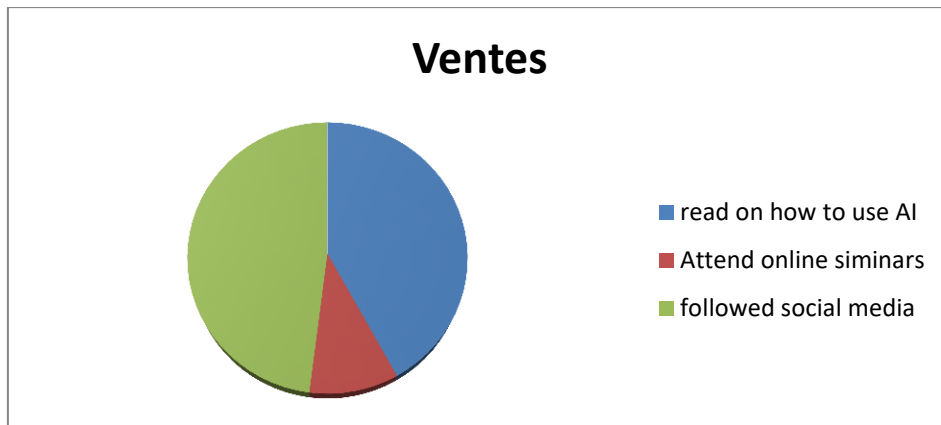
**Figure 5 : learners proficiency in in operating AI**

Figure 5 show the fact that 82% of population are average when it comes to operate AI applications, while 11% are considered to be experts, and only 7% are poor



### 1.3.2. Section 2 : Student's Experience with AI application

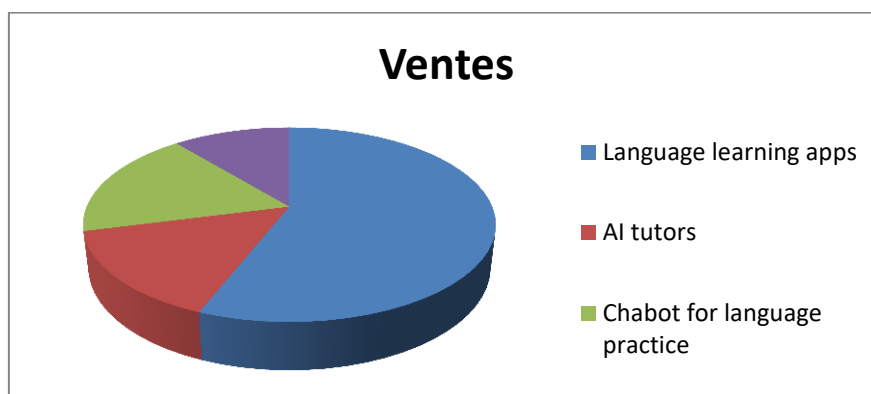
**Q 6: To get yourself ready to cope with the newly installed online learning applications have you ... ?**



**Figure 6 : Student's knowledge on coping with the new installed AI tools.**

Figure 6 indicates that 42 % of learners had read on how to use AI applications, while 48% follow social media to get familiar with the apps, on the other hands only 10% attended seminars to get familiar with these tools.

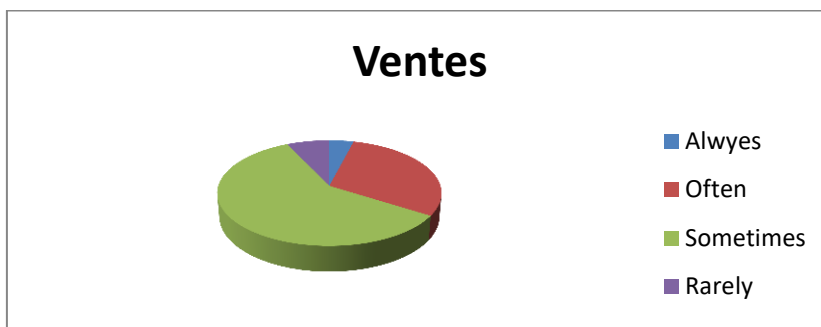
**Q 7 : Which AI powered tool or app have you used for English learning ?**



**Figure 7 : Learner's Type of AI used to learn English**

Within figure seven , 56% of participants use language learning apps powered by AI, on the other hand only 15% use AI tutors, while 18% use Chatbot for practice the language and finally only 11% use a combination of chatbot and language learning apps

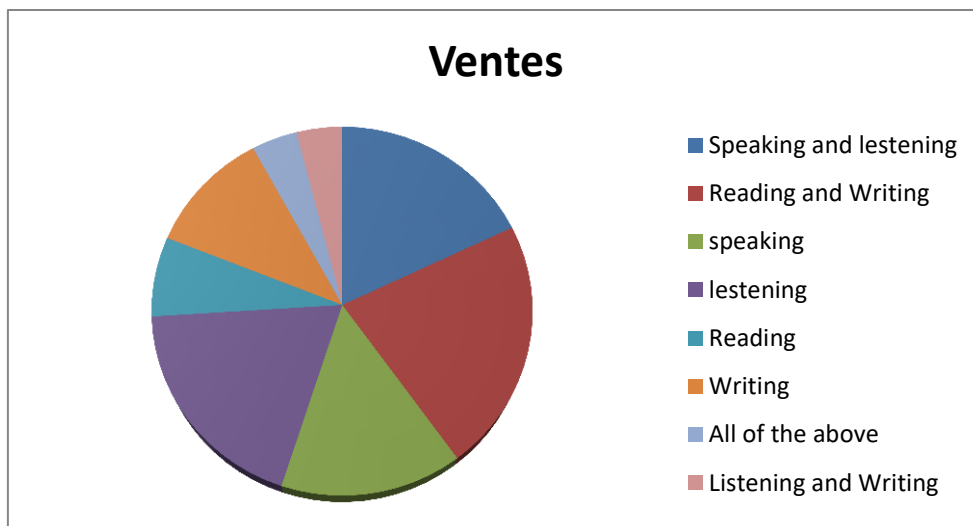
**Q 8 How frequently do you use AI tools for learning English ?**



**Figure 8 Learners frequency about using AI tools to learn English**

Figure 8 shed lights on the frequency of learners in using AI tools, indicating that 59% of population using AI only sometimes, while 30% often use it, on the other hand 7% using AI rarely, moreover only 4 % using it all the time

**Q 9 : What are the skills that you have improved the most during using AI tools for learning English ?**



**Figure 9 learner's most improved skill during using AI**

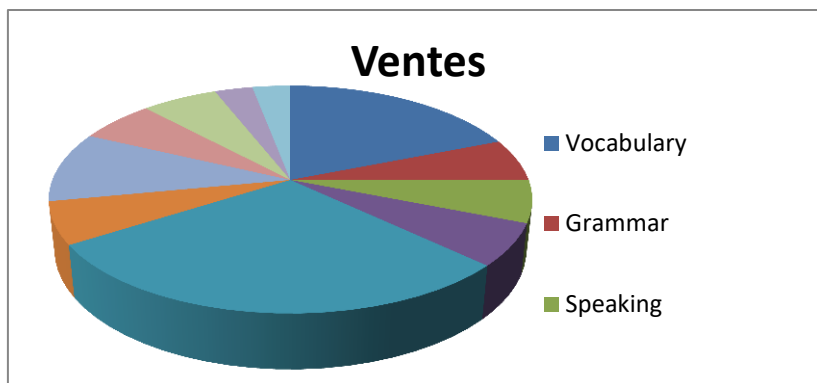
Figure 9 indicates that 18% of population improved their speaking and listening skills, while 22% experienced an increase in their reading and writing skills, on the other hand 15% developed their speaking skills, while 19% improve their listening skill, moreover 7% enhanced their reading capacity, while 11% were able to evolve their writing abilities and 4% said that they have experienced improvements in all the skills simultaneously, while 4% were able to develop more of listening and writing.

**Q 10: What are the main challenges that you faced while using AI ?**

**Table 01. Learners answers about the main challenges that they faced while using AI.**

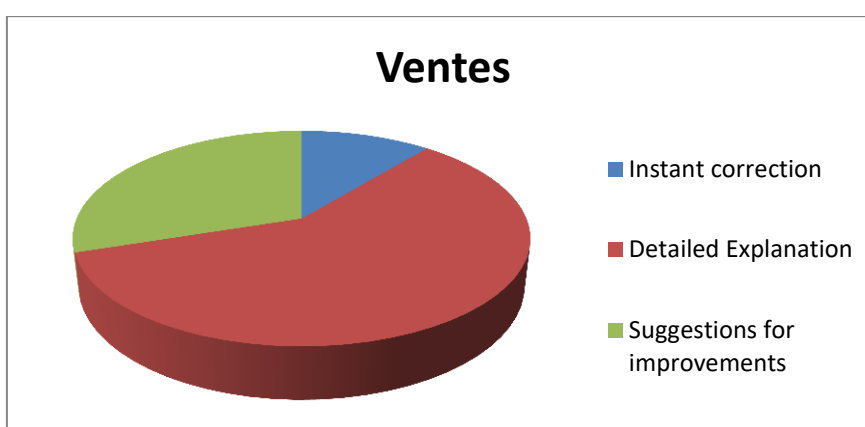
| <b>What are the main challenges<br/>That you faced while using AI ?</b> | <b>Learners answers</b>  |
|---|--|
| <b>JUSTIFICATION 1</b>  | <b>It does not give sufficient information with<br/>details</b>                              |
| <b>JUSTIFICATION 2</b>  | <b>It does not save information, so you need<br/>to write it down as quickly as possible</b> |
| <b>JUSTIFICATION 3</b>  | <b>Using ambiguous words and hard to<br/>understand</b>                                      |
| <b>JUSTIFICATION 4</b>  | <b>Unable to know if AI give reliable<br/>information</b>                                    |
| <b>JUSTIFICATION 5</b>  | <b>Sometimes its not free and require internet<br/>connection</b>                            |

**Q 11. What aspects of learning English Do you think AI can help you with the most ?**



**Figure 10. learners aspects of learning English while using AI**

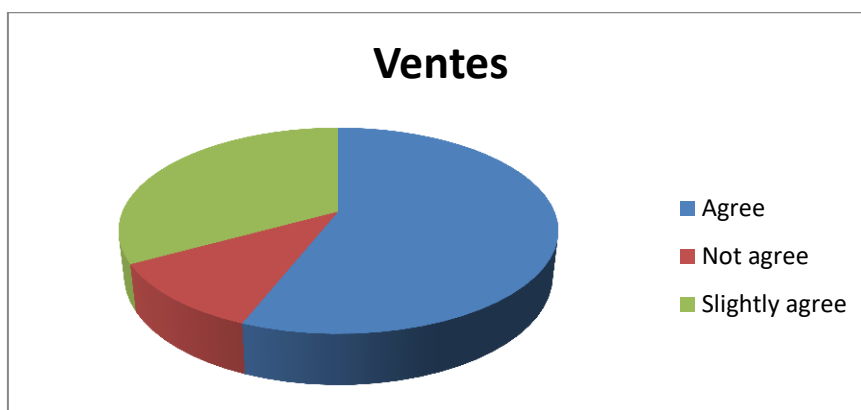
**Q12: How do you prefer the way of receiving feedbacks from an AI based tool ?**



**Figure 11 student's opinion on the way of receiving feedback**

The figure shows that 11 % of students prefer the instant correction, while 30% says that suggestions for improvements are better, on the other hand 59% reflected by saying providing a detailed explanation works best .

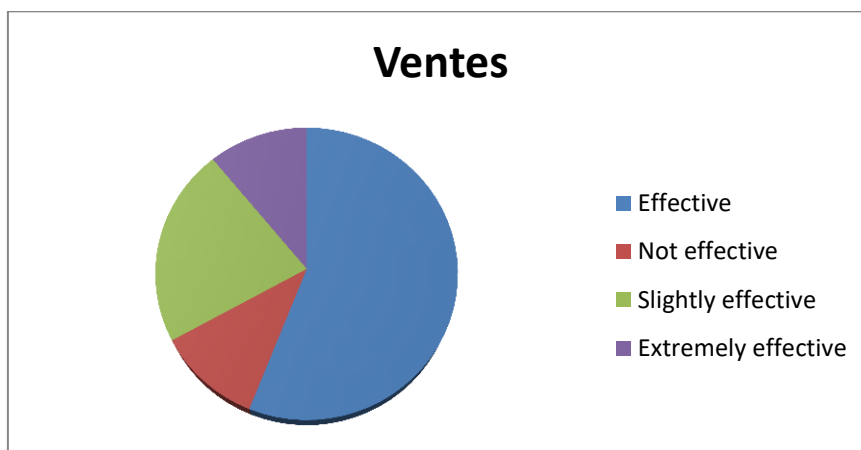
**Q 13 : Do you agree that there are some areas and fields in which AI can not help you with the most ?**



**Figure 12 : Learner's opinion on subjects that AI cannot help with**

Figure 12 shows that 56% of population reflected by agreeing on the fact that AI can not offer help always, while 11% did not agree, on the other hand 33% slightly agree .

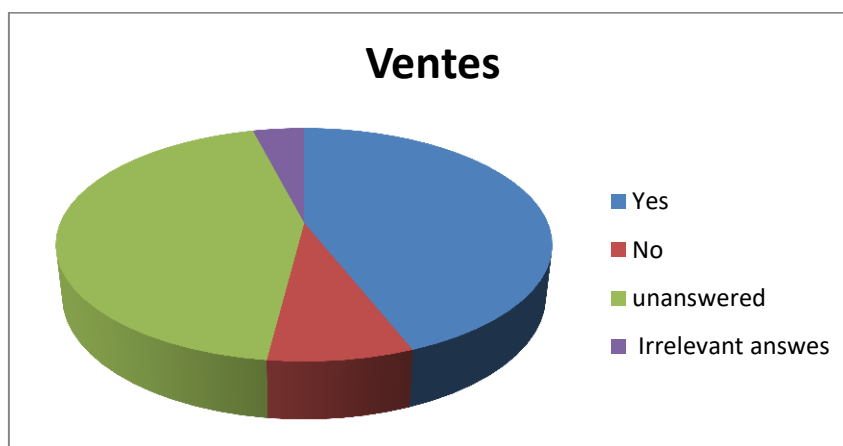
**Q14 : Do you find AI powered tools effective enough in terms of helping you learning English ?**



**Figure 13 Student's opinion on the effectiveness of AI in leaning English**

Figure 13 shows that 56% of population think that AI is effective in terms of learning English, while 11% reflected by saying its not effective, on the other hand 22% slightly on its effectiveness , while only 11% think its extremely effective .

**Q 15 Do you recommend the use of AI tools and applications to other learners ?**



**Figure 14 learner's recommendations on the use of AI to learn English**

## **1.4. Data analyses and interpretation**

### **1.4.1. One: student's questionnaire**

The present research aims to investigate the effectiveness and the significance of implementing Artificial intelligence in teaching English, through designing hand made questionnaire for third year EFL students. The results obtained from this questionnaire showed that integration of AI into English teaching and learning field has a tremendous significance on learning outcomes .

To start with, Figure one shows that the majority of participants choose to study English , having a 89% of them shows that they are willing and enthusiastic enough to learn more about the language in more academic way, this also shows the great significant, English language holds being a world-wide most spoken language by people, therefore everyone is studying it, on the other hand only 11% of the students reflected by saying that they did not choose to study English, which means that they might be forced to study the latter or they did not have much choices to compensate, although the percentage of participants who claim that they did not choose to study the language is low, however not choosing to study English might hinder the learning process for these students by being unmotivated and undisciplined in manner of learning .

Furthermore in figure 2, it shows that a 100% of participants enjoy learning English language, this indicate that all participants after getting familiar with the language they reflect positively towards learning the latter .

In figure 3 the results were draw as follow, 85% of participants considered themselves of having an intermediate level in English, this practically means that majority of them are having the enough capacity to develop more and acquire a higher level of proficiency, this also indicate to the fact of hard working and using technology along with discipline can make the difference in learning such world wide language , while 4% of them said they are only



beginners which shows that with time these beginners will also start to improve step by step, on the other hand 11% of the participants manifested that they are holding an advanced level when it comes to English language, showing that their proficiency level is bigger than their peers, indicating that they were learning and practicing English consistently for many years and using various sources .

Figure 4 and 5 demonstrate that the overall learners who use AI tools to improve their proficiency levels in English are estimate by 74% and only 26% do not use AI powered tools , this high percentage of using AI applications indicate the importance of using the latter in learning English language, while figure 5 shows that 82 % of learners are being average in operating AI tools, so its safe to say that those who know how to operate AI tools are the ones that use them the most to the develop their levels of proficiency in English while 7% of them were poor in operating AI tools demonstrating that they do not use very often .

Figure 6 and 7 going hand in hand showing that 48% of participant followed social media to know about AI tools for learning English, while figure 7 demonstrate that 56% of participants use language learning apps to learn the language, this means that most participant who use social media got educated about the existence of AI language learning apps while following social media and start using them in order to improve their levels in language learning.

Figure 8 shed lights on the fact that 59% of learners use AI tools every now and then, indicating that consistent use of these applications will eventually developed their skills, while 4% of them reflected on themselves by saying they use AI tools every day to improve their proficiency in English, showing that the everyday users of AI tools will have a better level more than those who use it sometimes, on the other hand only 7% answered that they use AI tools only rarely .

Within figure 9 it was shown that most participants has developed a various skills using AI powered tools, the results indicate that 18 % of learners develop speaking and listening skills, while 7% of hem experience an increase in reading skill only, on the other hand 11% of participants improve their writing using AI tools , moreover only 4% of learners developed their both listening and writing skills. On the other hand a 22% reflected that their reading and writing skills had improved, while 15% developed listening skill only, moreover 4% developed listening and writing abilities, while other 4% developed the four skills combined using AI tools, furthermore, 15% of them developed their speaking abilities only. these results indicates and emphasis on the fact that using AI tools can improve the four skills of learners, as well as the consistent use raise the engagement and motivational levels of the learners.

Table 01 shows the different answers of participants who answer the question of “ what are the challenges that you faced while using AI tools and applications ?

While three participants out of 27 said there no challenges and difficulties, on the other hand 24 members out of 27said they had different challenges that are summarised within the following points :

- It does not give sufficient information with its detailed
- While looking on information it use ambiguous words
- AI applications does not get you to know how to communicate in real life situations
- Not getting the exact information on the subject wanted

While these answers indicates that there seems a challenges that arise when using artificial intelligence tools, however its only 50% of the total truth, the other 50% is that AI system and its applications are newly used technological instruments in the field of learning therefore learners might find a difficulties in operate these tools to get the best benefits out of it.

While investigating on what aspects of learning English does participants think AI can help them with the most? Within figure 10 a percentage of 29% of participants reflected by saying that AI tools can help with learning : Grammar, Vocabulary, Speaking and Writing, showing again the importance of technology in developing learner's total skills of language . On the other hand the other percentages were stated as follow : 19% said its all bout vocabulary, while 18%reflected by giving the answer that AI can help with the Grammar, while 6% of them thought that AI mainly help with grammar and writing at the same time. 10% of them said Ai can help with speaking , vocabulary , and grammar in total, furthermore 6% of participants agreed on the fact that AI has an impact on developing grammar, vocabulary and writing , the other 6% answered that it help with vocab and writing , while the last 6%was divided by half which means 3% of participants agree that AI helps with developing grammar and vocabulary, while the last 3% said its mainly vocabulary and speaking is the two most significant skills that AI can help develop .

These results might seemed separated and does not make the different, but all of it indicate the fact that AI tools and applications addresses the different NEEDS of learners based on what they want to learn most within the language realm.

Figure 11 deals with the question of “ How does participants prefer the way of receiving feedbacks on their language skills ?” the majority of 59% of participants reflected by saying they prefer a detailed explanation on the mistakes they made, indicating that most learners are interested in developing their skills by reflecting on feedbacks giving by AI powered tools, furthermore, only 30% said that they prefer to have a suggestions for improvements while 11% of participants said they prefer instant correction, again those results though they are small, but they express the different needs of learners .

Figure 12 demonstrate the agreeableness of participants on the fact that “ if there are some areas and fields in which AI can not give any significant help?.” The majority of participants of 56% reflected positively on the fact that AI can not offer help in some areas and situations, this indicate to the limited use of AI generally and it needs to be updated gradually .on the other hand 11% and 33% reflected negatively to slightly agree pointing out to the fact that AI can offer help on general basis, it can be an effective technological tool in terms of looking for various information .

Figure 13 which was dealing with the question of “Does participants finds AI tools effective in terms of helping them in learning English ?.” the majority of 56% of participants agreed that AI was effective while 11% reflected by saying it was Extremely effective in terms of learning English, this shows the importance of AI in learning English the other 11% and 22% reflected negatively, indicating again to the fact that AI is a new revolutionary tool, therefore it can be a hard to operate it effectively .

Figure 14 was about the recommendations and the use of AI in this manner 44% of participants said they would recommend the use of AI for other individuals, showing the significance of the latter in the field of languages, on the other hand 8% said no they would not recommend it, indicating to the challenges that may come with using it, on the other hand 44% of participants did not answer on this question, while the other 4% gives irrelevant answers.

### 1.4.2. Two: Teachers' interview, analysis and interpretation

During conducting the interview on teacher's perceptions and practices toward implementing AI in English language teaching, it was noticed that the majority of teachers were teaching English from two to fifteen years (2\_15) according to teacher's statements on the question "How many years have you been teaching English?" the majority of them states that "I have been teaching English for thirteen to fifteen years, since 2005. I was a substitute teacher at the university, but then I have got the permit to teach full time." While others reflected on the same question by stating "I have been teaching for eleven years(11), well six years in middle school and five years at university."

Which indicates that all the ten (10) teachers have the enough experience and the capacities to teach English language on a high academic level?

In concerning the question that said "as a teacher have you received any training on implementing technology into your English teaching?" all the answers from all the ten teachers were actually positive stating that "yes I have received a training on using basic technological tools such as Google meet, zoom apps and uploading PDF into E learning platform"

The given answer indicates that the majority of teachers were dealing with technology and E learning platforms especially during the period of covid19.

Within question three the interviewees were asked to rate their familiarity with AI from scale 1 to 10, in this sense, most of the teachers argue that their familiarity is between two to six out of ten stating "I would say two maybe three maximum" while others stated "yes I would say that I am six on a scale one to ten" their answers on this question shows that their familiarity with the latter is very modest, going from being low to having an average knowledge on Artificial intelligence .

Question four was about what are the perceptions and practices of teachers toward implementing AI into English teaching? In this matter all the ten teachers responded positively by stating “ my perception ? I think it’s very positive, AI is a great addition to teaching because it saves time and help with lessons planning.” While others reflected by stating that “ I think we should use it because it motivate students to study and teachers to teach.” Furthermore some teachers argued about this point by saying “ I consider using AI as a boosting tool to improve the way we teach.”

On the other hand one of the interviewees argued that AI can be practice in a very limited way, emphasizing on the fact that “ AI can only be used when the students have a project or presentations to do, it can work as guiding tool to give them a head start and under the supervision of the commending teacher inside the classroom, also to helping them writing a paragraph in this case it can be used to check their grammar mistakes and evaluate their writing skills, other than that if it was used to generate an entire paragraphs it will be a plagiarism .”

While some reflected by saying “ I cannot decide if I’m for or against, I think its useful but the same time, one should not rely on it completely .”

About the use of AI in teaching English. The answers of the interviewees were divided into two sides, the first side, stated that they do not use AI in teaching English . “ I do not use unfortunately I only rely on books, because AI cannot provide reliable sources.”

While the second side argued that they use AI in their work, to improve writing and many more stating that “ I use quillbot for summarizing, paraphrasing and transmitting some ideas, I also encourage my students to use grammarly to check their grammar mistakes and sentences structures.”

Moreover some stated that “ I actually use it in order to help me identifying the main objectives of the subject that I am teaching.”

Next question was about what are the main benefits of using AI in teaching English ? the majority of teachers were having a positive reactions towered the latter, some of them stated that

“ it has a lot of benefits such as motivating students to learn, simplifying the teaching learning process and raising learner’s self-esteem.”

While other interviewees argued that “ it could save time and attract a large number of students because of its features, I think in some ways it can address learner’s needs.”

Moreover of this point, others reflected by stating the fact that “ I think AI is a great helping tool, it can help learners to acquire the language faster and help in developing learner’s pronunciation.”

About the question in which it suggests that AI can address learner’s divers needs ?

The majority of teachers reflected on the question by stating “ yes I think so, if a teacher is familiar with AI tools he can select the appropriate tool for dealing with specific need of the learner.” Furthermore on the subject some stated “ I think it depends on the style of the learner itself and yes in somehow I agree that AI can create a personalized learning experience for each individual.”

In terms of AI tools being more motivating and engaging for students during the teaching phase some of the interviewees agreed that AI is a motivating tool stating that “ yes indeed it keeps learners motivated.”

“ off course due to the alternatives it offers “ However others reflected in negative way in terms of the question argues that the continues use of AI create a state of independency for students along with a lot of other problems stating that “ using AI can make student dependable on it, in a way it steal their critical thinking abilities and their spirit of innovation, furthermore it lacks the interaction that use to exist between teacher and its students, in other

words the use of AI does not allowed for the student to build that student\_ teacher interaction.”

Concerning the main challenges and ethical issues that the teacher face during implementing AI in English language field and education as whole?

At this point, most of interviews stated that “ the main challenge is the ethical side of it, is it acceptable to do researches with...?” while other stated that the main challenge is “ the lack of the necessary knowledge to operate it.” In terms of ethical issues the majority agreed that the main ethical issue is that connected to plagiarism where they stated that “ most of teachers takes the information from chat GPT then giving it to themselves in this case its considered to be a plagiarism.” Furthermore some argued that “ if chat GPT does all your work then it’s not yours and it is theft.”

In terms of the ethical use of AI tools most of the teachers stated that “ it can be used to generate some ideas, paraphrasing and to avoid plagiarism.”

On the role evolving of AI, all the ten interviewees have agreed on the idea that AI will continue developing and have more enhancement stating that “ yes it will continue developing and have more features, to the point that it may replace real teachers.”



### 1.5. Discussion of the results

Based on student's questionnaire and teacher's interview. One of the search questions was: "what are the advantages of integrating AI in English language teaching and learning?" the latter can assist learners automating a specific tasks in order to save time (Xie et al, 2019 as cited in Robeolledo 2023). Furthermore It can create a personalized learning experience, helping learners acquiring more than one language skill. through the questionnaire, it was shown that most of learners acquired more than one skill varied between listening, speaking, written and reading. Moreover, it connect learners to a various cultural aspects and different customs. Kessler (2018) stated that AI exposed students to a tailored materials that fulfil their learning needs, On the other hand, It can keep learner's engaged and motivated thought the entire learning process, through using games and various ways to keep learners engaged. Johnson (2005) argued that the implementation of AI in English language field can keep learners motivated and engaged thought the entire learning process.

In terms of " what are the challenges that may stand as an obstacle in the way of AI implementation?" there has been found several challenges such as limited human interaction. During the interview that was conducted with some of the teachers it was pointed out that the absence of human interaction is considered to be the most constraints on AI, the latter do not provide the necessary human interaction, based on this it cannot teach communication skills effectively like it happened with a real life teacher, not to mention that the reclose use of AI tools would lead eventually to plagiarism so it needs to deal with carefully and use it with cautious. Furthermore lack of teacher's competencies stands also as major challenge in teaching English. During most of the interviews done with teachers of English it was shown that the majority of them have insufficient knowledge on the use of AI tools and applications in teaching English language, above all their familiarity with AI tools is ranked from 2 up to 6 on a scale 1 to 10 indicating that their knowledge about the latter is being low to average. with

this being said Ablakheel (2021) argued that educators have insufficient training on teaching and learning strategies on how to use AI in teaching which can be serious problem if it was not addressed .

One of the search questions is “ What are teachers perceptions and practices toward implementing AI in teaching English ?” in response to this question, most of the interviews done with teachers, the majority of them reflected positively to the integration of AI in English teaching saying that “ we should use it because it motivate learners to study and teachers to teach, moreover, students like technology using in their daily lives, so it might push them forward to study” Furthermore, some of them said “ AI is a good edition to teaching, teachers can use it in order to save time and create activities, also it can be used in lesson planning .” on the other hand some of the teachers declared that “ AI can be used in a limited way, more like a helping guide

for students in case they have a project to work on, it can give them a head start, also in case of writing paragraphs, it can guide them through the process of writing, otherwise depending on it to write an entire paragraphs and do their work for them it is considered to be a plagiarism, so it should be dealt with carefully.”

One of the controversial search questions is that “ Does the use of AI in learning English, improve learner’s language skills ?” Thought the students’ Questionnaire it was proven that most learners acquired more than one skill, indicating that AI can be adjusted to meet learner’s different needs.

On the other hand the question of “ How AI can be used ethically in the field of Teaching English ?” Most of the English teachers during the interview declared that “ if AI was used to steal someone’s work it will be an act of plagiarism therefore it is unethical to practice AI to take another researcher’s work “ While some of the teachers argued that “ It depends on how one can practice the use of AI, if it was used to generate activities to help learners develop

their language skills, then it's not considered to be a plagiarism, because the language that it is used to generate activities does not belong to any researcher, in this manner the language itself is a free component to use in creating a varied activities, but if AI was used to anticipate someone's work to yourself then it's unethical practice to be concerns about “

## 1.6. Pedagogical implication and recommendations

Based on the results obtain from the study it was shown that third year English students do use AI tools and applications in their daily lives to improve their level of proficiency in English, the findings on this study have implications for both teachers and academic facilities members within the field of English teaching and learning

To begin with teachers should be knowledgeable about the use of AI tools in EFL classrooms, in order to facilitate both learning and teaching process. Teachers need to be stacked with the essential skills and knowledge for a better implementation of AI technologies ( Fabrecio,2019).

Next is providing the appropriate infrastructure for a better and effective integration of AI systems within English language field. A study done by Zhu et al (2020)investigated the integration of AI\_ Based language learning tools in Chinese schools and it was discovered that the existence of the inappropriate infrastructure was a significant element, that hinder the effective integration of the AI technologies

Third point is keeping learners data safe and protected all the time during using AI tools to learn English. Rebolledo (2023)argued that it is important to keep language learner's personal information secured from being shared without their own permission, including proficiency levels, progression and learning styles .

### **1.7. Limitation of the study**

As any other investigation, there was a number of challenges and difficulties, while conducting the present research. Though the questionnaire was delivered by hand, a lot of participants did not answer on some of the questions, leaving a blank space makes it difficult for the researchers to collect data and interpret the results.

In terms of time sufficiency, researchers found a very short window to continue working on the current research taking in consideration the wide scope of information the study holds, further more gathering information and tracking resources was a process done during Ramadan, due to the act of fasting it was challenging for the researchers to keep up conducting the study

## **Conclusion**

The following study intended to investigate and explore the integration of AI\_ language learning tools in English teaching. With the assistance of references and the obtained results from analysis of the Questionnaire the researchers found out that third year English students were actually using and implementing AI tools and based applications in their daily English learning to improve their level of proficiency, Moreover, it was proven that learners learn better while using AI tools in order to develop their language skills every now and then

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## **General Conclusion**

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### **General conclusion**

To sum up, integrating Artificial intelligence in English language teaching and learning shows the Capacities of the latter in improving students' outcomes, opening a new perspectives and new horizons for the upcoming generations of language learners. When it comes to teaching, using a revolutionary tool such AI by teachers, it offers a lot of benefits, it gives them the chance to evolve and have more development in their line of work, help them to create tasks, activities and generate new teaching methods.

The study demonstrates the significance of implementing AI in English language teaching and learning, as well as the challenges that come along with the latter. In order to answer the search questions of this study, the researchers adopted and use Qualitative and Quantitative approach, for the purpose of collecting data, students questionnaire aims for inspecting student's experience and attitudes towards the integration and the use of AI tools to improve their level of proficiency in English. Based on the analysis of the questionnaire, it was settled that learners do use AI based tools and applications in their daily lives.

Moreover, throughout the study there was an indication that using Artificial intelligence is highly effective in improving students' level of proficiency. Therefore, the result obtained from the practical part goes hand in hand with the literature review.



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## Appendices

### Appendix one

## The students' Questionnaire

Dear students,

*This questionnaire is designed to gather data as a part of a research work, carried out in the frame work of a Master degree. It aims at investigating the implementation of Artificial Intelligence in the field of teaching and learning EFL, since it gained a significant role in education in the last few years.*

*We would be very grateful if you take a part in this questionnaire because your contribution is too important for the present research.*

*Please answer each question by **Ticking** the corresponding answer and make full statements whenever it is necessary.*

### SECTION ONE : GENERAL INFORMATION

#### 1) Do you choose to study English?

- a. Yes  b. No

#### 2) Do you enjoy learning English?

- a. Yes  b. No

#### 3) How do you evaluate yourself in English?

- a. Beginner   
b. Intermediate   
c. Advanced

#### 4) Do you use AI-based tools or applications to improve your level in English?

- a. Yes  b. No

#### 5) How would you rate your level of proficiency in operating AI applications?

- a. Poor   
b. Average   
c. Expert



## SECTION TWO: STUDENTS' EXPERIENCE WITH AI APPLICATIONS

**6) To get yourself ready to cope with the newly installed online learning applications, have you:**

- a. Read on how to use AI Apps
- b. Attended online seminars/workshops where experienced scholars offered instructions on how these app  be used
- c. Followed social media pages where daily or routine lesson updates are offered by trusted suppliers

**7) Which AI powered-tool or app have you used for English learning?**

- a. Language learning apps
- b. AI tutors
- c. Chabot for language practice

**8) How frequently do you use AI tools for learning English?**

- a. Always
- b. Often
- c. Sometimes
- d. Rarely
- e. Never

**9) What are the skills that you have improved the most during using AI tools for learning English**

- A. speaking
- B. Listening
- C. Reading
- D. Writing

**10) What are the main challenges and difficulties you have faced while using these applications?**

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### SECTION THREE: STUDENTS' ATTITUDES ABOUT USING AI APPLICATIONS

**11) What aspects of Learning English do you think AI can help you with the most ?**

- A. Vocabulary
- B. Grammar
- C. Speaking
- D. Writing
- E. All of the above

**12) How do you prefer the way of receiving feedback from an AI based-tool?**

- A. Instant correction
- B. Detailed explanation
- C. Suggestions for improvements

**13) Do you agree that there are some areas and fields in which AI- powered tool can not help you with in comparison to traditional learning methods ?**

- A. Agree
- B. Not agree
- C. Slightly agree
- D. Strongly agree

**14) Do you find AI powered -tools effective enough in terms of helping you learning English ?**

- A. Effective
- B. Not Effective

C. Slightly effective

D. Extremely effective

**Justify**

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**Section Four : Future recommendations**

**15)Would you recommend the use of AI to other individuals who want to learn English ?**

**Justify :**

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**Thank you for your participation**

## Teachers' Interview

Q1. How many years have you been teaching English?

Q2. During your years of teaching, have you received any training on implementing technology into your teaching?

Q3. On scale 1to10 how would you rate your familiarity with Artificial intelligence based-tools for teaching English?

Q4. What is your perception towards using Artificial intelligence in EFL teaching?

Q5. Have you integrated AI based-tools into your English teaching methods? If yes which AI based-tools have you integrated?

Q6. How do you use AI tools in your English teaching?

Q7. In your opinion, what are the main benefits of using AI in teaching English?

Q8. Is it possible that AI tools can address the diverse learners' needs?

Q9. As a teacher do you find teaching English using AI tools more motivating and engaging for students in comparison to the traditional methods?

Q10. During implementing and using Artificial intelligence tools have you noticed any improvements in students' performance?

Q11. What are the different difficulties and challenges that you faced as a teacher when integrating Artificial intelligence in teaching English?

Q12. What are the main concerns and ethical issues of implementing AI in EFL teaching and educational?

Q13. How can Artificial intelligence be used ethically in the field of teaching and learning?

Q14. How do you see the role of AI evolving in EFL teaching in the future?

## Résumé

La présente étude explore l'intégration de l'intelligence artificielle (IA) dans l'enseignement de l'anglais (ELT). La recherche vise à mettre en lumière l'efficacité, les défis et les préoccupations éthiques ainsi que les perceptions et les pratiques des enseignants à l'égard de la mise en œuvre de l'IA dans l'enseignement et l'apprentissage de l'anglais. L'étude contient deux chapitres, le premier chapitre comprend la partie théorique et le chapitre deux contient la partie pratique, chaque chapitre est divisé en deux sections.

L'étude révèle que l'utilisation de l'IA dans l'ELT présente un large éventail d'avantages, notamment une expérience d'apprentissage personnalisée, un retour instantané et une augmentation de l'engagement des apprenants. Cependant, des défis tels que le manque d'infrastructures, les préoccupations en matière de protection de la vie privée et la formation insuffisante des enseignants constituent des obstacles importants à une mise en œuvre efficace et réussie. De plus, l'étude souligne l'importance des éléments culturels et contextuels dans la mise en œuvre de l'IA dans les pratiques d'ELT. En résumé, les chercheurs de l'étude présentée soulignent les capacités et les potentiels de l'IA et son rôle dans l'amélioration des expériences et des résultats d'apprentissage de l'anglais, ainsi que sur la nécessité de relever les défis associés pour utiliser sa mise en œuvre de manière éducative.

**Mots clés :** IA, ELT, traitement du langage naturel, applications mobiles d'apprentissage des langues

### الملخص

الدراسة الأتية تستكشف إدماج الذكاء الإصطناعي في تعليم اللغة الإنجليزية . يهدف البحث لتسليط الضوء على فعالية , التحديات و المشاكل الأخلاقية التي ترافق إدماج هذا الأخير في مجال تعليم اللغة الإنجليزية .

تكشف الدراسة أن إستعمال الذكاء الإصطناعي في مجال تعليم اللغة الإنجليزية يقدم فوائد كثيرة تتضمن توفير تجربة تعليمية تخصصية , توفير النقد البناء و رفع مستوى المشاركة لدى المتعلم , و لكن مع وجود تحديات مثل ضعف البنية التحتية التكنولوجية و وجود مخاوف من إنتهاك البيانات الشخصية ب الإضافة الى ضعف خبرة الأساتذ, كل هذه الأمور تعتبر حاجز يعرقل الإدماج الناجح ل الذكاء الإصطناعي , فوق كل هذا ف إن البحث يبرز أهمية العناصر الثقافية التي ترافق الذكاء الإصطناعي في تعليم اللغة الإنجليزية .

أخيرا من خلال هذه الدراسة حاول الباحثين معرفة و تسليط الضوء على قدرات و إمكانيات الذكاء الإصطناعي و دوره في تحسين تجربة تعلم اللغة الإنجليزية ب الإضافة الى ضرورة التعامل مع التحديات التي تأتي معه من أجل تسهيل إدماج هذا الأخير في مجال التعليم.

**الكلمات المفتاحية:** الذكاء الإصطناعي, المعالجة اللغوية, التطبيقات التعليمية. تعليم اللغة الإنجليزية.