AI ASSISTED TEACHING: PRACTICES AND PERSPECTIVES OF INSTRUCTORS ON USING AI TOOLS IN ELT

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MASTER'S THESIS

Department of Foreign Languages Education
English Language Education Master's Program with Thesis
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İstanbul
T.C. Maltepe University
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JÜRİ VE ENSTİTÜ ONAYI

ALPASLAN ÇİFTÇİ'ın "Yapay zeka destekli öğretim: İngilizce öğretiminde yapay zeka araçlarının kullanımına ilişkin öğretim görevlilerinin uygulamaları ve perspektifleri" başlıklı tezi 17.07.2024 tarihinde aşağıdaki jüri tarafından değerlendirilerek "Maltepe Üniversitesi Lisansüstü Eğitim ve Öğretim Yönetmeliği" nin ilgili maddeleri uyarınca Yabancı Diller Eğitimi Anabilim Dalı Yüksek Lisans/Doktora/Sanatta Yeterlik tezi oy birliğiyle/oy çokluğuyla, başarılı/başarısız olarak kabul edilmiştir.

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Alpaslan ÇİFTÇİ

July, 2024

ÖZET

YAPAY ZEKA DESTEKLİ ÖĞRETİM: İNGİLİZCE ÖĞRETİMİNDE YAPAY ZEKA ARAÇLARININ KULLANIMINA İLİŞKİN ÖĞRETİM GÖREVLİLERİNİN UYGULAMALARI VE PERSPEKTİFLERİ

Alpaslan Çiftçi
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Yabancı Diller Eğitimi Anabilim Dalı
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Maltepe Üniversitesi Lisansüstü Eğitim Enstitüsü, 2024

Bu çalışma İstanbul'daki bir vakıf üniversitesinde görev yapan İngilizce öğretim görevlilerinin yapay zeka (YZ) araçlarının İngilizce öğretimine katılmasına ilişkin algılarını ve uygulamalarını incelemektedir. Araştırmacı bu çalışmada nitel bir yaklaşım benimseyerek anket, yarı yapılandırılmış görüşmeler ve kompozisyonlar aracılığıyla veri toplamıştır. Bir vakıf üniversitesinin İngilizce hazırlık bölümünde görev alan toplam 98 İngilizce öğretim görevlisinin katıldığı çalışmada veriler sürekli karşılaştırma yöntemi kullanılarak tematik olarak çözümlenmiştir. Çalışmanın amacı öğretim görevlilerinin YZ araçlarını kullanırken algıladıkları yararları ve zorlukları bulmak, ayrıca bu araçları farklı yeterlilik düzeylerine ve dil becerilerine uyarlama stratejilerini incelemektir. Bulgular İngilizce öğretim görevlilerinin YZ araçlarını derslerinde çeşitli amaçlarla kullandıklarını ve genellikle YZ'nın İngilizce öğretimine katılımına yönelik olumlu algılara sahip olduklarını ortaya koymuştur. Araştırma YZ araçlarının gelişmiş öğrenme deneyimleri, kişiselleştirilmiş öğretim, artırılmış öğretim verimliliği ve artan öğrenci katılımı gibi temel yararlarını tanımlamıştır. Bununla birlikte teknik sorunlar, etik kaygılar, YZ'ye olası bağımlılık ve öğretimde insan unsurlarını sürdürme ihtiyacı gibi zorluklar da tespit edilmiştir. Eğitmenlerin YZ araçlarını farklı yeterlilik seviyelerine uyarlamak için, başlangıç seviyesindeki öğrencilere yönelik temel kelime alıştırmasından ileri düzey öğrenciler için karmaşık yazma görevlerine kadar çeşitli stratejiler kullandıkları bulunmuştur. Sonuç olarak, bu çalışma İngilizce öğretim görevlilerinin öğrencilerin

öğrenmelerini desteklemek için YZ araçlarını kullanmaya yönelik olumlu algılara sahip olduklarını, ancak öğretimde insan öğesini korurken YZ'nin güçlü yönlerinden yararlanan dengeli bir yaklaşımın önemini vurguladıklarını ortaya koymuştur. Elde edilen bulgular dil eğitiminde YZ bütünleşmesine ilişkin İngilizce öğretimi öğretim bilimi, mesleki gelişim ve kurumsal politikalar için önemli çıkarımlar sunmaktadır.

Anahtar Sözcükler: İngilizce öğretimi, eğitimde yapay zeka, dil öğrenme teknolojisi, öğretim görevlisi algıları, yapay zeka katılım stratejileri

ABSTRACT

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This study examines the perceptions and practices of English Language Teaching (ELT) instructors regarding the integration of artificial intelligence (AI) tools in their teaching at a foundation university in Istanbul. Employing a qualitative approach, data were collected through a questionnaire, semi-structured interviews, and essays. The study involved a total of 98 English language instructors working in the English preparatory department of a foundation university. The data were analyzed thematically using constant comparative method. The research aimed to explore the benefits and challenges instructors perceive in using AI tools, as well as their strategies for adapting these tools to different proficiency levels and language skills. Findings revealed that ELT instructors use AI tools in their lessons for various purposes and largely hold positive perceptions towards AI integration. The study identified key benefits such as enhanced learning experiences, personalized instruction, improved teaching efficiency, and increased student engagement. However, challenges were also noted, including technical issues, ethical concerns, potential over-reliance on AI, and the need to maintain human elements in teaching. It was found that instructors employ various strategies to adapt AI tools for different proficiency levels, ranging from basic vocabulary practice for beginners to sophisticated writing tasks for advanced learners. In conclusion, this study demonstrates that while ELT instructors have positive perceptions towards using AI tools to support student learning, they emphasize the importance of a balanced approach that leverages AI's strengths while preserving essential human elements in teaching. The findings have

significant implications for ELT pedagogy, professional development, and institutional policies regarding AI integration in language education.

Keywords: English Language Teaching, artificial intelligence in education, language learning technology, instructor perceptions, AI integration strategies

GENİŞLETİLMİŞ ÖZET

YAPAY ZEKA DESTEKLİ ÖĞRETİM: İNGİLİZCE ÖĞRETİMİNDE YAPAY ZEKA ARAÇLARININ KULLANIMINA İLİŞKİN ÖĞRETİM GÖREVLİLERİNİN UYGULAMALARI VE PERSPEKTİFLERİ

Bu çalışma İstanbul'daki bir vakıf üniversitesinde görev yapan İngilizce öğretim görevlilerinin, yapay zeka (YZ) araçlarının İngilizce öğretimine katılmasına ilişkin algılarını ve uygulamalarını incelemektedir. Araştırmacı, nitel bir yaklaşım benimseyerek anket, yarı yapılandırılmış görüşmeler ve kompozisyonlar aracılığıyla veri toplamıştır. Çalışmaya 98 öğretim görevlisi katılmıştır. Veriler sürekli karşılaştırma yöntemi kullanılarak tematik olarak çözümlenmiştir. Araştırmanın amacı öğretim görevlilerinin YZ araçlarını kullanırken algıladıkları yararları ve zorlukları bulmak, aynı zamanda bu araçları farklı yeterlilik düzeylerine ve dil becerilerine uyarlama yöntemlerini incelemektir. Çalışma, YZ araçlarının İngilizce öğretiminde kullanımının giderek arttığı bir dönemde, bu konudaki bilgi eksikliğini gidermeyi hedeflemektedir.

Araştırma soruları şu şekildedir:

S1. İngilizce öğretim görevlilerinin YZ araçlarını öğretim uygulamalarında kullanmaya ilişkin bakış açıları nelerdir?

S1.1 Algıladıkları yararlar nelerdir?

S1.2 Karşılaştıkları zorluklar nelerdir?

S2. İngilizce öğretim görevlileri, YZ araçlarını sınıflarında belirli becerileri ve yeterlilik düzeylerini kapsayacak şekilde nasıl kullanmaktadır?

S2.1 A1 veya B2 gibi farklı yeterlilik düzeyleri için YZ araçlarını uyarlamak üzere hangi yöntemleri kullanmaktadırlar?

Bulgular İngilizce öğretim görevlilerinin YZ araçlarını derslerinde çeşitli amaçlarla kullandıklarını ve genellikle YZ katılımına yönelik olumlu algılara sahip olduklarını ortaya koymuştur. Araştırma, YZ araçlarının gelişmiş öğrenme deneyimleri, kişiselleştirilmiş öğretim, artırılmış öğretim verimliliği ve artan öğrenci katılımı gibi temel yararlarını tanımlamıştır.

Öğretim görevlileri YZ araçlarının öğrenme deneyimini birçok yönden geliştirdiğini belirtmişlerdir. YZ temelli sanal öğretmenler ve sohbet robotları gibi araçlar, öğrencilere kişiselleştirilmiş yardım, anında geri bildirim ve etkileşimli öğrenim olanağı sağlamaktadır. Bu özellikler öğrenciler için İngilizce öğrenimini daha etkili ve ilgi çekici hale getirmektedir. YZ destekli platformlar, öğrencilerin kendi hızlarında öğrenmelerine olanak tanıyarak bireysel öğrenme gereksinimlerine ve tarzlarına uyum sağlamaktadır. Kişiselleştirilmiş öğretim YZ araçlarının sunduğu bir başka önemli yarardır. Öğretim görevlileri, bu araçların her öğrencinin bireysel gereksinimlerine göre içerik ve alıştırmalar sunabildiğini vurgulamışlardır. Bu özellik geleneksel sınıf ortamında tüm öğrencilerin farklı gereksinimlerini karşılamanın zorluğunu aşmada yardımcı olmaktadır. Bunun yanında YZ araçlarının öğretim verimliliğini de arttırdığı ortaya çıkan sonuçlar arasındadır. Öğretim görevlileri bu araçların materyal oluşturma gibi önemli görevleri otomatikleştirerek zamandan tasarruf sağladığını belirtmişlerdir. Bu sayede öğretmenler ders planlaması ve öğrencilere bireysel destek sağlama gibi daha önemli alanlara odaklanabilmektedir. Artan öğrenci katılımı İngilizce öğretim görevlileri tarafından vurgulanan başka önemli bir bulgudur. Öğretim görevlileri bu araçların öğrenmeyi daha etkileşimli ve ilgi çekici hale getirdiğini, böylece öğrencilerin motivasyonunu ve derse katılımını artırdığını gözlemlemişlerdir. Bununla birlikte çalışma YZ araçlarının kullanımında bazı zorlukları da ortaya çıkarmıştır. Bunlar arasında teknik sorunlar, etik kaygılar, YZ'ye olası bağımlılık ve öğretimde insan unsurlarını sürdürme gereksinimi yer almaktadır.

Teknik sorunlar, yazılım hataları ve bağlantı sorunları gibi konuları içermektedir. Bu sorunlar, dersin akışını bozabilmekte ve hem öğrenciler hem de öğretmenler için hayal kırıklığına neden olabilmektedir. Ayrıca, yeni teknolojilere alışma sürecinin yarattığı zorluklar da bazı öğrencilerin YZ araçlarının etkililiği konusunda şüphe duymalarına yol açabilmektedir. Etik kaygılar ve gizlilik sorunları öğretim görevlilerinin vurguladığı diğer

önemli zorluklardır. Öğrenci verilerinin toplanması ve saklanması, veri koruması ve yönetmeliklere uyum konusunda sorular ortaya çıkarmaktadır. YZ algoritmalarının öğretim uygulamaları ve kararları üzerindeki olası etkisi de endişe yaratmaktadır.

YZ'ye olası bağımlılık, öğretim görevlilerinin dikkat çektiği bir başka konudur. Bazı öğretmenler, öğrencilerin YZ teknolojilerine aşırı bağımlı hale gelebileceğini ve kendi bilişsel ve dilsel yeteneklerini geliştirmeyi ihmal edebileceklerini gözlemlemişlerdir. Öğretimde insan unsurunu koruma gereksinimi bulgusu YZ araçlarının kullanımında dengenin önemini vurgulamaktadır. Öğretim görevlileri YZ'nin bir öğretim görevlisinin kişisel dokunuşu ve beklenmedik durumlara uyum sağlama yeteneğini tam olarak taklit edemeyeceğini belirtmişlerdir. Çalışma öğretim görevlilerinin YZ araçlarını farklı yeterlilik düzeylerine ve dil becerilerine uyarlamak için çeşitli yöntemler kullandıklarını da ortaya koymuştur. Başlangıç düzeyindeki öğrenciler için oyunlaştırma, tekrar ve etkileşimli öğeler içeren temel kelime ve dilbilgisi alıştırmaları kullanılmaktadır. İleri düzey öğrenciler için ise, karmaşık yazma görevleri ve ayrıntılı geri bildirim sağlayan araçlar tercih edilmektedir.

Sonuç olarak, bu çalışma İngilizce öğretim görevlilerinin öğrencilerin öğrenmelerini desteklemek için YZ araçlarını kullanmaya yönelik olumlu algılara sahip olduklarını, ancak öğretimde insan öğesini korurken YZ'nin güçlü yönlerinden yararlanan dengeli bir yaklaşımın önemini vurguladıklarını ortaya koymuştur. Elde edilen bulgular dil eğitiminde YZ katılımına ilişkin İngilizce öğretimi pedagojisi, mesleki gelişim ve kurumsal politikalar için önemli çıkarımlar sunmaktadır. Bu araştırma YZ araçlarının İngilizce öğretiminde kullanımının hem dönüştürücü potansiyelini hem de zorluklarını vurgulamakta, geleneksel öğretim yöntemlerini geliştiren ancak onların yerini almayan dengeli bir yaklaşımın gerekliliğini ortaya koymaktadır. Çalışma YZ'nin belirli bir kültürel bağlamda uygulanmasına ilişkin değerli bilgiler sunarak eğitimciler, kurumlar ve geliştiriciler için rehberlik sağlamaktadır. Bulgular İngilizce öğretimi pedagojisi ve politikası için önemli çıkarımlar taşımakta, sürekli değerlendirmenin önemini, öğretimde insan unsurlarının korunmasını, etik kaygıların ele alınmasını ve YZ araçlarına eşit erişimin sağlanmasını vurgulamaktadır.

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LIST OF ABBREVIATIONS

AI **:** Artificial Intelligence

ASR : Automatic Speech Recognition

AWE **:** Automated Writing Evaluation

CALL **:** Computer Assisted Language Learning

CCM **:** Constant Comparative Method

ELT **:** English Language Teaching

ITS **:** Intelligent Tutoring Systems

I : Instructor

ML **:** Machine Learning

NLP **:** Natural Language Processing

GenAI **:** Generative AI

1. INTRODUCTION

This thesis investigates the perceptions of English instructors on the integration of Artificial Intelligence (AI) tools in English Language Teaching (ELT) at a foundation university in Istanbul. This chapter outlines the central themes of the research, including the statement of the problem in 1.1, the aim of the thesis in 1.2, the significance of this research in the field in 1.3, the limitations of the study in 1.4, and the definitions of main terms used throughout the thesis in 1.5.

1.1 Statement of the problem

Artificial intelligence has made fast progresses since 2022 leading to its increasing application in various fields, including education and ELT as a particular case. From lesson planning to personalized learning paths, AI tools have a variety of functionalities that can change the process of teaching and learning. These tools however are underutilized and not properly investigated from the point of view the instructors who use them to teach English. This body of knowledge recognizing the transformative potential of AI in education is growing but there is a limited number of research which investigate how ELT teachers incorporate, perceive and exploit these AI tools in their pedagogical practices. Existing research on AI in education falls short when it comes to investigating how the complex functionalities of AI tools interact with and integrate into the day-to-day teaching practices of ELT instructors. Moreover, how effective these tools are for teachers with respect to language learning is still underexplored (Lampou, 2023).

One of the current trends is the integration of AI tools in ELT which is noticeable the highest positive outcomes (Yin et al., 2022; Fitria, 2021). However, ELT instructors face several challenges when integrating these technologies. For example, there are privacy and surveillance issues pertaining to AI-powered tools, while there are also concerns about data security and ethical use by collecting and analyzing student data. Redefining teaching practices by integrating AI tools has to be a major change that can instill apprehension in most teachers who have been used to conventional pedagogical practices. This may again elicit mixed reactions from the learners towards learning through AI-

mediated instruction, some of whom may feel uncomfortable or resist (Moulieswaran & S, 2023; Fassbender, 2024).

Instructors with more experience also exhibit a positive outlook on AI tools because of the automation capabilities and timesaving aspect of these tools, as well as their offer in creating positive changes which might provide value to the teaching process (Hazaymeh et al., 2024). However, the lack of technical skills, insufficient physical resources, and lack of support from academic institutions could hinder the implementation of AI for ELT (Bhandari, 2020). Perception of an instructor toward the integration of AI tools in their practice is a crucial consideration that can be enhanced through offering specific training and requisite support (Silviyanti, 2015). For example, institutions offering extensive training sessions and continuous technical assistance allow instructors to apply AI tools in the classroom environment. Those without necessary support are unable to fully leverage these technologies as those with support do. The complex relationship between AI's potential and its challenges in ELT makes studying instructors experiences and perspectives crucial, as they are at the forefront of implementing these tools in practice. This implementation may, in turn, lead to potential transformations in the language education field. This study aims to address these precise issues by thoroughly examining the experiences. This study aims to address key issues in AI integration in ELT such as instructor experience, tool efficiency, and difficulties in the implementation process and their support needs. It contributes to understanding the real practicalities of how AI tools are integrated into language teaching frameworks by exploring instructors' experiences and perceptions.

1.2 Aim of the study

The aim of this study is to elaborate the findings based on how the ELT educators in a foundation university in Istanbul perceive and employ AI tools in their instructional practice. As stated previously, incorporation of AI technologies in ELT is now common due to advancement in technology in the year 2022. Thus, this study focuses on the perspectives, concerns, and the implementation approaches of the ELT teachers towards the integration of AI tools into the instruction process. The rationale for the study can be attributed to the two questions. The first research question focuses on the current practice

of ELT instructors in integrating AI tools into classroom practice or ideas and perceptions they have toward AI tools implementation in their practice and challenges that they might face. Thus, the stated objective is to present an analysis of the current ELT practices regarding AI tool implementation, as well as shed light on the factors that may impact teachers' perceptions of AI technologies. The second was to review on how the ELT instructors integrate AI tools as a way of addressing particular skills/levels of proficiency in class and the strategies observed in how the instructors modify them for different learning context and learners. It focuses on how instructors teach ELT through the interfaces of existing AI tools and how they address the issues that are precipitated by use of such technologies in teaching and learning practices. Achieving these objectives, the study intends to fill the gaps of the current literature regarding the applications of AI in language education. The results of this study will reveal how ELT instructors engage with the use of AI and their attitudes toward if, which will help in efficiently employing AI in language learning. However, in contrast to the current literature that mostly investigates the technological implications of AI in ELT, this study will analyze the effectiveness of AI in the specific cultural and organizational context of the participating university.

Thus, the purpose of this study is to produce findings that are actionable and helpful for not only the educators but also the academic community at large, including instructors, academic institutions, educational decision-makers, and companies that develop AI tools. In this respect, this research aims to shed some light on the human aspect of integrating AI in ELT, and therefore, contribute to the existing discourse on the future of technology adoption in education to improve learning and teaching.

1.3 Significance of the study

The relevance of the present study is underpinned by its efforts to expand the existing literature on the use of AI tools in ELT. Since educational systems are changing at varying paces depending on the technological advances and AI activities, more research findings are required involving outlooks from practical levels of instructors. A key factor that distinguishes this study from many others lies in its localized scope. Through the identification and analysis of instructors' experiences teaching in the given cultural and institutional context, this study offers a valuable perspective on how these factors shape

the use of AI tools in ELT. This context-specific approach increments existing research, which covers artificial intelligence's technical aspects, enriching the perspective with human factors. The results of this study can be helpful in designing strategies for integrating AI tools in various contexts of education due to consideration of the peculiarities of each context.

Additionally, the use of a questionnaire, semi-structured interviews, and open-ended essays further enriches this study's data, providing both breadth and depth to instructors' experiences. In doing so, this research enriches the understanding of how AI impacts the methods and practices of the ELT sector as a whole and from the instructors' point of view, thereby narrowing the gap between the technical possibilities of the AI technology and human-centric approaches.

The findings of this research thus have practical implications in the following ways. By eliciting the beliefs about the presumed advantages and barriers to the integration of AI in instruction, the study can empower both the implementation of practices and the improvement of technologies. The findings derived from this study may aid practitioners in addressing their issues for a more suitable implementation of AI tools in ELT and offer optimal enhancement to the teaching and learning processes. From the side of learners, it allows the formation of more individual and effective strategies for the pedagogical process by considering the teachers' viewpoints, which in turn fits the opportunities of applying AI.

1.4 Limitations

As with any research, this study has limitations that must be acknowledged to understand their impacts on the results concerning the practices and perceptions of ELT instructors towards the use of AI tools in their practice. One significant limitation is the generalizability of the findings, as the investigation was conducted at a single institution, a foundation university located in Istanbul. While this provides a rich description of the specific cultural and institutional factors explored in the study, it also raises questions about the applicability of the findings to other settings or cultures. These views and

experiences of these teachers might not be valuable for their counterparts in other institutions or other countries, so it limits generalization of results for that particular test.

One of the limitations is that this study is based on the qualitative research method only. It is imperative to note that this research has employed questionnaire survey, semi structured interviews and open-ended essays with limited participant of ELT instructors which may not be highly generalizable. While this design is useful in offering more specific first-person accounts of the respondents' experience and attitude, there might be limitations into the extent that this study may not offer a holistic representation of the ELT community. Of equal importance, convenience sampling brings about certain biases since the sample might not be a true reflection of the total population of ELT instructors in the university or in the whole world.

In order to overcome these limitations, a number of steps were taken. To enhance credibility and validity, data gathered through a questionnaire, semi-structured interviews, and open-ended essays were cross checked and validated. Member checking was done by circulating perspectives incorporated in the analysis with participants to get feedback or validation to represent the perspectives, experiences, and perceptions of participants' views. Although these remain the shortcomings, the study has tried to address them proactively and in a manner that is as transparent as possible. The researchers recognize the likely influence of such factors and therefore discuss at length likely impacts on the findings. Such transparency regarding the limitations increases the creditability and reliability of the study, leaving potential readers in a position to interpret the results in the right context.

1.5 Keywords and Identification

This section presents the conceptual framework of this thesis, which aims to give definition of various terms that will be repeated in this thesis to avoid confusion and to make the meaning clear and concise.

Artificial Intelligence (AI): The term that refer to devices that solve problems and learn from their experiences as the human beings do (Morandín-Ahuerma, 2022).

Machine Learning: A field of artificial intelligence where algorithms are trained to forecast certain outcomes from available information (Alpaydin, 1992).

Natural Language Processing (NLP): Subfield of AI that tackles the ability of machines to comprehend the written and spoken word and the meanings behind them (Jurafsky & Martin, 2021).

2. LITERATURE REVIEW

In this chapter, required definitions and terms are given that are associated with AI and its subfields, machine learning and deep learning. General viewpoints of the use of AI in education, with an emphasis on ELT, are discussed. Common applications of AI as well as its benefits and factors influencing its use in ELT, emphasized in previous studies, are discussed. Lastly, based on numerous previous studies, categorization of functions of AI tools in language education, theoretical foundations, and ethical considerations with relevance to modern educational practices, and relevance and impact are examined within ELT.

2.1 Exploring Artificial Intelligence Paradigms

AI has emerged as a transformative force across various sectors, including education. The concept of AI, however, is not new. Bartneck et al. (2021) trace its origins to the 1956 Dartmouth conference, where pioneering academics envisioned machines capable of performing intellectual activities such as language use, problem-solving, and learning. AI is broadly defined as a scientific discipline focused on developing, evaluating, and applying intelligent computing systems capable of making rational decisions (Bartneck et al., 2021). These systems extract information from their environment and optimize their behavior to achieve set goals (Deng, 2018). Poole and Mackworth (2017) emphasize the role of intelligent agents in AI, describing them as entities that process input from their environment and select appropriate actions based on algorithmic reasoning. The field of AI has evolved significantly since its inception. Russell and Norvig (2021) highlight the diversity of approaches in creating intelligent behaviors in machines, from production systems to logical planners. A key feature of AI is its capacity to improve performance through data input and experience, mirroring aspects of human intelligence (Deng, 2018).

Different perspectives on AI have shaped its development. Morandín-Ahuerma (2022) discusses the approach centered on mechanical thinking, akin to the Turing Test, which aims to mimic human-like behavior. However, Boden (2016) critiques this approach for potentially overlooking AI systems' unique capabilities. Another perspective, outlined by

Recent advancements in AI have led to significant breakthroughs in various fields, with generative AI emerging as a particularly transformative technology. Generative AI, a subfield of artificial intelligence, creates content mimicking human creativity, including text, images, and more (Ramdurai & Adhithya, 2023). Companies like OpenAI, Google, Microsoft, and Nvidia are at the forefront of this AI revolution. Yamaguchi et al. (2023) highlight how these organizations have introduced advanced tools with capabilities such as natural language processing, real-time translation, superior image and pattern recognition, and AI bots simulating human interactions.

In the context of ELT, generative AI tools, particularly ChatGPT, have shown promising potential. Liao et al. (2023) found that these tools can enhance students' language skills across listening, speaking, reading, and writing and they further elaborate on ChatGPT's core competencies, including text generation and contextual understanding, which can support various educational tasks such as syllabus creation and personalized feedback. However, the integration of generative AI in ELT is not without challenges. Liao et al. (2023) note issues such as language mechanical errors and high usage thresholds. Despite these challenges, the strategic incorporation of AI in EFL teaching holds significant potential for revolutionizing language education practices, offering opportunities for more interactive, adaptive, and personalized learning experiences.

When it comes to discussing the subfields of AI, another important sub field emerges which is machine learning (ML), a subset of AI, has particularly impacted the field of education. Jordan & Mitchell (2015) define ML as a subdiscipline of AI that creates methods allowing systems to learn from data, recognize patterns, and make decisions with minimal human intervention. ML is typically categorized into three types: supervised learning, unsupervised learning, and reinforcement learning (Thomas, 1996).

In the context of ELT, ML's potential lies in its ability to create individualized learning environments. Wang et al. (2020) emphasize the importance of developing ML models that are explainable, unbiased, and accurate, particularly in educational settings. The application of ML in ELT offers opportunities for tailoring educational content to individual learner needs and preferences, potentially transforming traditional education approaches.

The next subfield of AI is deep learning, an advanced form of ML, uses neural networks to mimic human brain-like learning mechanisms. Paluszek et al. (2022) describe deep learning's ability to develop hierarchical concepts, enabling computers to break down complex ideas into simpler ones. This capability is particularly relevant in ELT for tasks such as natural language processing and speech recognition.

Young et al. (2018) highlight the development of deep ensemble models like the Deep Super Learner, which has shown improved classification power across various domains, including education. In ELT, deep learning technologies have the potential to transform differentiated learning trajectories by processing large amounts of educational data to deliver content relevant to individual student needs.

The application of AI, GenAI, ML, and deep learning in ELT represents a significant shift in language education paradigms. These technologies offer promising avenues for personalized learning, adaptive assessment, and intelligent tutoring systems (Luckin et al., 2016). However, their integration also raises important considerations regarding data privacy, algorithmic bias, and the balance between technological innovation and essential human aspects of language teaching (Jobin et al., 2019).

As AI continues to evolve, its impact on ELT is likely to grow. Future research in this field should focus on addressing the limitations of current AI tools, exploring ways to enhance their effectiveness in supporting language acquisition, and ensuring that the essential human elements of language teaching are maintained. The ongoing development of AI in ELT presents both opportunities and challenges, necessitating a balanced approach that leverages technological advancements while preserving the fundamental aspects of language education.

2.2 Artificial Intelligence in Education

The intersection of AI with educational methodologies represents a transformative shift in pedagogical practices, offering innovative pathways for instructional design, learning processes, and assessment mechanisms. As discussed in "An Introduction to AI in Education," the historical development of AI in educational contexts can be traced back to the inception of the earliest "teaching machines" in the 1950s and the proliferation of

Intelligent Tutoring Systems (ITS) in the 1970s. This period signifies a long-standing interest in leveraging technology to enhance educational outcomes. Early AI systems were modeled on cognitive architectures, suggesting the brain's function as an information processor (Holmes & Tuomi, 2022). This initial phase prepared the progressive integration of the AI technologies in education, which brought developers to build chatbots and AI language models, such as ChatGPT, which have thoroughly changed the learning and assessment methodologies developed to date (Baker, 2023). The improvement from the initial making of teaching machines—clunky and uninviting devices—to the advanced ITS, and further down the line to platforms like Altitude Learning and Duolingo, marks a history of increased personalization and interactivity in learning experiences (Tonbuloğlu, 2023; Holmes & Tuomi, 2022; Baker, 2023).

It was during the 1980s that the effort to create a cohesive Artificial Intelligence in Education (AIED) community, which prompted shared paradigms and the formation of international AIED societies, had its major impact. This period established that AI could potentiate student learning and make it a more personalized experience using both adaptive testing and intelligent tutoring systems that help to combat stamped problems dealing with student engagement and inequality (Quan, 2023). There has been this continued sustained interest witnessed over the previous three decades to see the application of AI within education and for it to actually matter with the continued exploration of AI's potential for use (Hamal et al., 2022).

Recently, AI has been implemented in education with great ethical considerations and acceptance, and it has promoted a great paradigm shift in learning and human development (Yu & Yu, 2023; Rajaei, 2023). The great paradigm is much attributed to rapid technological strides that formed the basic foundation on which AI has been integrated to foster personalized learning, automation of tasks, and an informed teaching strategy through analytics of data (Chaudhry et al. ,2022). Moreover, this digital era has left no stone unturned for education institutions to ascertain readiness in IV to remain compatible with the routine students' engagements in digital tools. Educator perceptions around the implementation of AI emphasize the need to reflect their beliefs, openness, and the effects of AI on teaching practices for sound policy development and the implementation of AI technologies (René, 2023). The pandemic has helped speed up the

necessity for AI in education and its place in coherent online courses, live classes, and personalized learning paths (Sihem, 2022). Secondly, the impact of AI in the realm of its influence goes beyond the classroom to the administration of learning institutions as demonstrated by the AI-driven admissions platforms that have eased the application procedures. Teachers, students, technologists, and policymakers, among other major stakeholders, provide the basis upon which the integration of AI in education depends. The views of these stakeholders shape their teaching policies and the delivery of education, with teachers especially being involved not only at the design phase but also the runtime of AI-based educational systems (Nguyen et al., 2022; Dillenbourg, 2016). This interaction is key in ensuring that AI technologies can be trusted, on the basis of credibility, epistemology, among others, and its pedagogical implications as well (Cukurova et al., 2019; Luckin & Cukurova, 2019). The incorporation of AI in English language instruction, evidenced in the study by Xu and Ouyang, is exemplary in promoting the transformative nature of AI to learning outcomes, motivation, and self-regulated learning. This shows its potential for personalized feedback, adaptive content, and promotion of metacognitive and collaborative skills, hence the strong need for additional research on long-term effects, applicability, and ethical considerations in educational settings.

AI development and its gradual application in educational settings are the result of a multidimensional process driven by technological progress and taking into account the multitude of human and pedagogical factors. Since AI is in a continuous process of reshaping educational paradigms, its future innovative and inclusive reach will depend on sustained investigation for ethics and other considerations.

2.3 Theoretical Foundations of AI in ELT

The integration of AI in ELT is underpinned by several key theoretical frameworks and pedagogical approaches. Thadphoothon's (2022) study highlighted that the advent of AI technologies such as speech recognition, grammar correction, chatbots, and translation tools marks a significant shift, often referred to as ELT 3.0, necessitating new competencies for educators.

The theoretical foundations of AI in ELT can be traced back to several linguistic theories. Capone's (2005) work on Pragmeme theory provides insights into language function within context, while Bara's (2010) theory of integrative pragmatics explores pragmatic behaviors and observer evaluations that enable the building of numerous models for a deeper understanding of language use in various contexts. Fischer et al.'s (2020) research emphasized the importance of understanding these theoretical underpinnings to address key challenges in AI applications in ELT. Furthermore, studies by Fitria (2021) and Yin et al. (2022) demonstrated how AI technologies, including chatbots and systems with natural language processing, help create interactive and engaging learning environments.

The constructivist approach, inspired by Jean Piaget's work, has become a significant theoretical paradigm in AI for ELT. Johnston (2023) described how this approach enables machines to develop a deep understanding of their environment based on sensorimotor interaction. Gary Drescher's seminal work (1991) set the foundation for developing algorithms and knowledge structures for AI agents, allowing them to construct their understanding of the world through interaction and experience.

Connectivism, proposed by Siemens (2005) and Downes (2012), has emerged as another prominent framework for understanding learning in the digital age. Despite criticisms from researchers like Kop & Hill (2008) and Bell (2011), who argue that connectivism is not a separate learning theory, its principles have been widely considered in the application of AI in education and ELT.

Analysis of the literature reveals that AI technologies, particularly adaptive learning systems and personalized learning platforms, leverage networked environments to individualize learning experiences. However, the effectiveness of these AI-based tools in promoting language learning has been contested. While studies like Gyamfi & Gyaase (2015) claim AI-driven language learning platforms can enhance learners' motivation and engagement, others such as Becker & Nguyen (2017) scrutinize their ability to provide meaningful feedback and support. The COVID-19 pandemic has further highlighted the relevance of Connectivism and AI in education. Huebner (2022) and Govender & Govender (2022) illustrated how digital platforms have become indispensable for distance learning and knowledge sharing. The integration of AI in ELT presents both

opportunities and challenges. While AI tools offer personalized learning experiences and immediate feedback, concerns about their effectiveness in fostering long-term language acquisition persist. As Blodgett et al. (2020) pointed out, there's also a risk of AI algorithms reinforcing biases and inequalities in language education.

As the field of ELT continues to evolve with AI integration, it is crucial to approach these technologies with a critical eye. Future research should focus on addressing the limitations of current AI tools and exploring ways to enhance their effectiveness in supporting language acquisition while maintaining the essential human elements of language teaching.

2.4 Instructor Interactions with AI in ELT

The integration of AI in ELT is one of the important areas of concern nowadays. AI technologies are gradually developing and with time, and its huge capability of bringing a change in the teaching-learning process has been able to draw great attention among the researchers and teachers. This section explores definitions of AI in ELT, overall perspectives towards AI in ELT classrooms, common reasons for integrating AI, AI usage determinants, and categorized functions of AI in ELT, drawing upon previous research in the field.

Research on AI in ELT has drawn due attention to the potential benefits and challenges during the integration of AI. In the study by Tulasi and Rao (2023), the positive influence of AI on the academic progress of students is underlined, while AI teaching had been demonstrated to show a remarkable influence on raising the results in the academic setting. Supporting this view with their study, Simamora and Tenrisanna (2023), who claim that AI technologies like virtual reality and augmented reality could create more engaging and effective learning environments. However, it is imperative to consider concerns and challenges that are attached to the use of AI in ELT. Tiwari (2024) noted that the adoption of AI has created fear among the instructors that consideration will result in their job displacement, reduction of human contact, and sustaining the ethics of data privacy and security matters. Such concerns call for a balanced approach towards the potentialities and pitfalls with the benefits of AI, with due consideration for keeping the human at the nucleus towards the teaching-learning process.

2.5 AI-Enhanced Tools and Methodologies in ELT

AI-enhanced ELT tools and methodologies have, thus, emerged as promising solutions for personalized learning, immediate feedback, and language skills development. Starting from the first Computer Assisted Language Learning (CALL) softwares to the present AI-powered chatbots and adaptive learning systems, the evolvement of AI in ELT has taken place using technological advancements of natural language processing, machine learning, and cognitive computing. Some of the earliest developments toward AI-enabled language learning tools included Intelligent Tutoring Systems (ITS) and CALL programs, and together, they are still a critical component of the fundamental integration of AI in education. The earliest studies on ITS and CALL programs highlighted their potential to provide personalized learning experiences and immediate feedback to students.

According to Baskara (2023), AI powered chatbots has transformed the teaching-learning process by personalizing learning to the cognitive functioning of humans in aspects such as problem-solving and reasoning. This personalization is further supported by the idea that AI can improvise on educational content based on student needs and improve engagement and understanding that way. In addition, innovative solutions of AI have been produced to measure student engagement with and focus on learning tasks. Such developments have revolutionized language teaching and learning. Applications of AI in ELT go even beyond the personalization of learning experiences, having an impact on assessment. AI algorithms can predict a student's mood for a test and also recognize a student's learning style with a specific learning behavior, enabling teachers to provide that student with more individualized learning content. The personal touch from this kind of approach adds to better teaching strategies and student engagement.

One of the most concrete examples of the application of artificial intelligence in ELT is the use of virtual tutors and chatbots. Such AI-based tools have gained prominence as useful aids to language learners involving personalized help, instant feedback, and interactive practice (Huang et al., 2021). Early virtual tutors and chatbots were implemented and utilized as supplementary tools for language learning. Acting as a knowledgeable friend and offering the content necessary for language learning within

simulated environments, virtual tutors and chatbots support students in their learning process, especially in distance education settings.

Use of virtual tutors and chatbots supports autonomous language learning since learners can interact with the learning contents all the time without human support. According to Chen et al. (2020), implementing such tools increases students' engagement and effectiveness of learning alongside providing real-life language practice. Furthermore, it has been investigated in the context of tutoring and counselling services offered in Higher Education Institutions (HEIs) for creating personal learning plan and course choice (Koivisto, 2023) and support and helping learners and tutors (Touimi et al., 2020).

Another important application of AI to ELT is Automated Writing Evaluation (AWE). AWE tools, are used to help students improve their writing, enhance the writing capacity of the students through the tool's fast feedback, personalized guidance, and ability to revise. In fact, the history of AWE tools is mainly related to the history of attempts at automating the evaluation process for which initial experimental attempts offered limited scope and accuracy. For Sarıcaoğlu and Bilki (2021), such technologies should be used as supportive mediums – helping students enhance their language proficiency by providing feedback.

Both Taşkıran et al. (2022) and Benali (2021) state that the AWE tools greatly enhance writing skills since they can be used to detect errors and the source of the error, after which immediate and individualized feedback is given to the learner. They added that these AWE technologies had permeated learning environments to reduce the teachers' assignments, provide immediate scores, and even offer the students feedback. These AWE tools are used along with input from the teacher and provide immediate scoring as well as qualitative feedback to the students and thus act as writing development support for students (Raitskaya & Tikhonova, 2022).

Besides virtual tutors, chatbots, and AWE tools, speech recognition technology has also become an integral aid to pronunciation training in ELT. Available Automatic Speech Recognition (ASR) technologies enable students to practice their English-speaking skills while receiving real-time feedback on their level of pronunciation accuracy (Tejedor-

García et al., 2020). This led to early developments concerning the use of ASR in pronunciation training to provide basic pronunciation accuracy feedback. Through the incorporation of ASR systems within language learning environments, instructors have used their full range to offer personalized pedagogical support for the effective mastery of English pronunciation. Research by Evers and Chen (2020) and Wang (2022) also show how this ASR technology can be useful in identifying the errors in pronunciation and help learners to correct them. These systems include software that identifies instances when a specific word or phrase is pronounced wrongly and also buries feedback to the student regarding the mistake and accompanies the learning progression of the student (Arora et al., 2018). In addition, ASR technology makes it possible to design more engaging pronunciation exercises that would help the learners practice English in a safe environment, check the quality of their pronunciation, and receive accurate feedback on the specific phonetic mistakes they make (Yin, 2018).

2.6 Common Reasons for Integrating AI

When it comes to the common AI integration reasons, one of the main reasons is that AI tools can provide individualized learning paths to better suit the needs of the given learners in ways that will result in greater engagement and retention. Tulasi and Rao (2023) further argue that this use of artificial intelligence gives immediate feedback that helps students to better their language skills more effectively. This personalized approach in the learning process is of need in ELT, as students have diverse backgrounds and proficiency levels. Another significant reason for the integration of AI with ELT is in the potential for this technology to automate administrative tasks, including assessment grading, enabling the instructor to have more time for interactive and creative teaching with students (Chen et al., 2020). By relieving burnout from routine tasks, AI can offer educators more time and energy to spend making a meaningful impact on students and furthering learning. While the benefits may be obvious, AI in ELT must be carefully considered and successfully applied. Hazaymeh et al. (2024) found the importance of instructor technological competency when adopting AI tools. This finding indicates that the more experienced and technologically competent teachers are more likely to consider applying AI in their teaching. However, the finding has also called attention to interesting barriers that impede the application of AI in ELT, including participants' small

competences either in ICT, poor infrastructure, or the lack of training. These results underline the need for institutional support and professional development opportunities where instructors will be equipped with the necessary skills and resources to effectively implement AI in their practice of teaching.

Furthermore, a closer look at the various functions that AI serves in ELT can be brought home. Jiang (2022) categorizes many AI applications in ELT as automatic evaluation systems, intelligent tutoring systems, and AI chatting robots. Each of these categories presents different ways in which AI can improve the learning process. For example, intelligent tutoring systems will adapt to the learner's needs for a personalized instruction system. This adaptiveness in learning has huge potential in getting better student outcomes in view of course customization with each student's strengths and weaknesses. Similarly, AI chatting robots allow students to participate in practice conversations set up in a synchronous mode and consequently enhance their speaking and listening skills in a more engaging way.

While a lot of benefits are laid out using AI in ELT, it is important to consider specific classroom settings where these technologies are going to be applied. For example, one study conducted by Tiwari (2024) in Nepal threw light on the contrasting expectations and concerns between university-level English teachers in support of AI's role in language instruction. This portends the need for a balanced approach that takes into consideration the unique need and challenge specific to each classroom's circumstance. An educator thus must strongly consider cultural and institutional factors that may affect both use and effectiveness in a given context. With the understanding of classroom profile and the relevance of AI to its particular teaching objectives, instructors can develop strategies that would be much more targeted and effective in integrating AI into practices.

2.7 Future Directions and Ethical Considerations

As the field of AI continues to evolve and expand, its integration into ELT has become an increasingly important area of research and practice. While AI-based tools and methodologies offer numerous opportunities for enhancing language learning experiences, it is crucial to consider the future directions and ethical implications of this

integration. This section looks at the future of AI-language learning tools, challenges and limitations on the use of such tools, and the ethical considerations that need to be addressed for responsible and effective implementation.

In this regard, Na-young, Cha, and Kim (2019) give a detailed review of different types of intelligent chatbots that pertain to language learning. In their study, it is strengthened that, even if there are few programs of chatbots that are directly interacting with other chatbots or humans using voice recognition systems or texting in order to learn foreign languages, such tools have yielded positive results in enhancing the students' communication skills across time. They also mention some positive impacts of chatbots in increasing the amount of the learners' interactions, easing meaning negotiation, motivating them, and raising their interest in learning. Nevertheless, they conclude that more studies are required for the design of chatbots that are aimed at foreign language learning and then they propose future research directions with regards to chatbots in the framework of language education.

Another study into the potential of the chatbot as a language learning medium was conducted by Haristiani (2019), with this study focusing on a tutor in practicing language. This shows that language learners express a preference for the use of chatbots because they are available and because, in asking questions, they have higher confidence compared to asking questions to the tutor. These findings underscore the importance of further investigation and development in AI-based language learning tools for enhanced functioning and usability. Vall and Araya (2023) assert that AI-language learning tools have instilled a number of benefits in reducing learning time, making the learning speed high and offering personalized learning experiences; simultaneously, they exhibit the deficiency of human interaction in it, the contextual intricacies of a language and the need for too much data in order to train appropriately. The authors discuss the potential in integrating virtual reality and augmented reality technologies with current AI-infused language learning tools or in further enhancing natural language processing algorithms, alongside the development of more advanced adaptive learning algorithms. They emphasize the need for the establishment of more powerful tools of language learning and more effective user experiences while dealing with these challenges and limitations.

In their research, Sajja et al. (2023) presented a new framework - Artificial Intelligence Enabled Intelligent Assistant, which may help facilitating personalized and adaptive learning experiences across Higher Education. The system embeds advanced AI and NLP methods; hence, the learning environment is significantly more interactive for them, not mentally taxing, and self-assessing. Personalized learning support is also provided for all students. The authors discuss the methodology, system architecture, intelligent services, and integration with Learning Management Systems while highlighting the challenges, limitations, and future directions for the development of AI-enabled intelligent assistants in education. This study informs the design, development, and assessment of AI-supported virtual teaching assistants for improved instructional delivery at HEIs. That is, it goes a long way in the creation of those new education tools whose common mission is to increase learner satisfaction, engagement, and learning outcomes.

Essa et al. (2023) focused on the personalized adaptive learning technologies, machine learning techniques with an intention to learn use-styles. Use in this study was made of valid scientific literature after 2015 and until 2022 through which to deal in advance on possible emerging trends and gaps in the existing literature on the learning style models and the machine learning techniques used for the purposes of personalized adaptive learning platforms. The results indicate an increasing interest in using artificial neural network approaches to identify learning styles, but limited work has been conducted on the comparison of deep learning methods in this context. This is further reiterated by the fact that the findings of the current study suggest the need for more empirical investigation in documenting the adoption and comparison of deep learning algorithms when classifying learning styles in order to provide higher adaptability.

Although the adoption of AI in education presents several advantages and benefits, the integration process also brings about several very serious ethical concerns related to the privacy and protection of students' data. In this respect, Huang (2023) analyses the risk that AI technology poses to students' private information and suggests ways of addressing concerns about the security of students' data. Therefore, the writer advocates identifying the underlying principles in the AI technology that could allay its risks to humanity, like respect and safeguarding human rights, fundamental freedoms, and dignity in all stages of AI development. The study equally observes that users of AI technologies need to have

adequate autonomy to protect and promote their individual rights and freedoms while ensuring human agency is not compromised.

Homayouni et. al. (2024) presents a literature review concerning ethical considerations in using AI in e-learning. The authors identify key ethical considerations, including respecting human rights, privacy, equity and fairness, trust and accountability, transparency, enhancing learning outcomes through surveillance of learners' performance and learning process, providing equal opportunities to access technologies, and avoiding discrimination and bias. The study also brings into highlight that there is an emergent need for formulating some general rules and unethical considerations related to the application of AI in e-learning that help to take into account the creation of solutions regarding new autonomous systems that raise ethical issues while applying AI in online education setups. Nazaretsky et al. (2021) research human factors, specifically trust, in forming teachers' attitudes toward AI-based educational technology. The researchers have brought the views and attitudes of science teachers into focus who interacted with a variety of AI-based technologies specific for education. It shows that teachers are not willing to take the suggestions of AI when it goes against their previous understanding of the students and assume AI to be faultless in all scenarios, even when the possibility of absolute truth actually does not exist. It is in this regard that the study lies in the importance of human agency in adopting AI in educational systems and the dire need for a close study regarding learners' perceptions about AI tools and their trust in those systems.

3. METHODOLOGY

The present chapter provides an account of the research questions, the research design, the participants, data collection tools, and procedure, including data analysis procedure, in order to investigate the perceptions and practices of ELT instructors concerning the use of AI tools in their classrooms. As previously presented in Chapter 1, this study aims to elucidate ELT instructors' perceptions regarding benefits and challenges for the integration of AI tools into their instruction, as well as how they adapt the tools to different proficiency levels and specific language skills in their classes. Precisely in order to achieve these goals and have comprehensive findings, the methodological design adopted, including constant comparative method and purposive sampling of the participants along with the use of a questionnaire, semi-structured interviews, and open-ended essays as data collection tools. In this study, constant comparison method has been employed in a systematic manner to explore the experiences, perspectives, and insights of the participants, while ensuring trustworthiness and credibility of the findings.

3.1 Research Questions

This research is set to explore the views of English instructors related to artificial intelligence, specifically by describing their perceived benefits and challenges in using AI tools and how they implement AI tools within different levels and language skills. Thus, the current study seeks to address the following research questions:

RQ.1 What are the perspectives of ELT instructors on using AI tools in their teaching practice?

RQ.1.1 What benefits do they perceive?

RQ.1.2 What challenges do they encounter?

RQ2. How do ELT instructors employ AI tools to cover specific skills and proficiency levels in their classes?

RQ2.1 What strategies do they use to adapt AI tools for different proficiency levels, such as A1 or B2?

Answering the first research question, the study revealed the diverse attitudes of the ELT instructors regarding the integration of AI tools in their classrooms. It encompasses not only their general beliefs and attitudes towards innovative technologies but also their conceptions about possible advantages and risks connected to the application of such technologies to language instruction. The second research question provides information on how instructors use AI tools in teaching, the kind of strategies they use when teaching learners who have various levels of language proficiency. This question aims at explaining the details and changes necessary for implementing the application of AI tools in teaching different language abilities while paying close attention to the flexibility of the tools in meeting the needs of every level of proficiency. As a whole, these research questions constitute the framework for this study as they would help to frame the data collection and analysis methods as well as enhance the overall understanding of the impact of AI tools for ELT from the instructors' point of view.

3.2 Research Design

In light of the research objectives that focused on emergent themes within the perception and accounts of ELT instructors, adopting a qualitative research approach was determined to be suitable for this study. This study employed a phenomenological approach using the Constant Comparative Method (CCM), a systematic data analysis technique that involves iterative coding and comparison of data to identify emerging themes, which is especially fitting for analyzing the large amounts of comprehensive data provided by participants (Moustakas, 1994; van Manen, 2016). The study followed an inductive approach, allowing themes to emerge from the data rather than testing predetermined hypotheses. One reason for using this design is that it is especially applicable when studying diverse and detailed objects and situations in which participants experience a phenomenon. The use of CCM is also advantageous as it is flexible and can progress through the different stages of the research process, allowing the researcher to attend to the emergent themes and patterns that are evident in the participants' responses (Boeije, 2002). This flexibility characteristic of the qualitative research methods means that data collected is more detailed, diverse, and accurately captures the true feelings and experiences of the instructors. Moreover, the qualitative paradigm is chosen in line with the research question in order to highlight the perceptions, difficulties, and possibilities that instructors

encounter in their teaching activities through the use of AI tools. As noted by Creswell and Poth (2018), seeking an understanding of such phenomena as human experiences, behaviors and beliefs makes qualitative research results the most appropriate; therefore, the present study is suited for a choice of qualitative research.

These strategies were used in an effort to maintain methodological credibility and rigor as well as to enhance the credibility of the data collected: member checking and data triangulation. Member checking involves the process of presenting the preliminary findings about what the participants experienced and perceived about the phenomenon of the study to the participants themselves for validation purpose to enhance the validity of the findings (Lincoln & Guba, 1985). Data triangulation was conducted through the use of different kinds of data such as data collected from the questionnaire, interviews and open-ended essays. This did not only enrich the data but also assured that the results were cross-checked and hence made this study more valid and reliable. A questionnaire and secondly semi-structured interviews and thirdly open-ended essays, therefore, would serve as the principal means of data collection. This followed the given specificity for the methods to obtain intricate first-person narratives of participants' experiences. While the questionnaire did help the researcher capture initial data in a systematic format, the semi-structured interviews enabled the researcher to ask follow-up questions and delve deeper into the responses of the participants, and the open-ended essays helped in detailing the data further. Therefore, it can be said that integrating a phenomological approach using CCM together with a questionnaire, semi-structured interviews, and open-ended essays as forms of data collection constituted a firm and highly reliable methodological framework for the study. It was appropriate for the purpose of capturing instructors' view and experiences of AI, thus, helping the study meet the stated objectives and increasing the understanding of how AI could be adopted in ELT.

3.3 Participants

The participatory process took place during the months of March to May of the academic year 2023-2024. The research was conducted in the Preparatory School of a foundation university in Istanbul, Turkey. This setting was chosen due to its potential for providing insights into AI integration in ELT. The institution's recent initiatives in educational

technology and its diverse faculty provided an opportunity to explore various perspectives on AI use in language instruction. In order to get a sample that best represented the intended study participants, the researcher utilized a purposive sampling technique. Purposive sampling is quite flexible in use for different research since it allows the researcher to strategically choose information-rich cases that can best address the research objectives (Patton, 2015). Participants were chosen only because they volunteered to share their experiences regarding the use of AI tools for teaching English language skills. Recruitment of participants commenced with an informative email to all English language instructors at the Preparatory School: a total of 160 instructors were given an explanation of the purpose, voluntary nature of the participation, and data collection. From the pool of responses that were gathered, 12 instructors were willing to volunteer to become participants for the in-depth interview stage of data collection. The participant selection process followed the participants of informed consent and ethically sound research. All the participants received broad information regarding the intent of the study, data collection methods, and steps taken to maintain confidentiality and anonymity. It was also particularly informed on the participants that participation was voluntary, and they were free to opt out of the study at any given time without any consequences. With the purposive sampling technique, this study sought to recruit participants with different backgrounds and experiences to draw a comprehensive and rich understanding of the perceptions and practices of ELT instructors with regard to AI tools in teaching contexts.

3.3.1 Consent and ethics

Prior to the data collection phase, the researcher observed all precautions in relation to ethical considerations and transparency. For this, the questionnaire, semi-structured interview questions and open-ended essay questions have been meticulously crafted by drawing from the core objectives of the research and relevant prior investigations. These questions, along with the overall study proposal, underwent a rigorous review process by the ethical board at Maltepe University in order to obtain the necessary approvals. Following this ethical clearance, the researcher properly informed the General Coordination of Foreign Languages where the data destined to be collected by sending the approval documents from the university's ethical board. The aim was to raise awareness and work within the institution in collaboration with the research process. For

the interviews, all participants were given a document containing comprehensive information on the scope and purposes of the study. Importantly, the document included a consent form that the participants signed if they voluntarily agreed to take part.

To ensure participant confidentiality, names were replaced with alphanumeric codes, all identifying information was removed from research documents, and a secure, encrypted key linking codes to identities was maintained separately, with data aggregation used where possible to further protect individual privacy. The research process was guided by a multifaceted ethical approach, addressing participant rights, data protection, institutional compliance, and research integrity at every stage from consent to final reporting.

3.4 Data Collection

The data for the research was collected through a questionnaire, semi-structured interviews, and open-ended essays. These instruments were relevant to collect detailed data on the subject under study from many perspectives.

3.4.1 Data collection tools

3.4.1.1 Questionnaire

A qualitative questionnaire was employed as the first data collection instrument due to questionnaires ability to uncover new insights and strategies not easily captured by predefined questions. This approach was particularly suitable for investigating ELT instructors' beliefs and practices regarding AI technologies in teaching, as it allowed for the collection of detailed, contextualized information. Unlike quantitative questionnaires, this method provides a deeper understanding of the research subject by capturing nuanced details and context-specific information (Fossey et al., 2002). This aligns well with the study's aim to explore instructors' perceptions of benefits, challenges, and adaptations of AI tools across various proficiency levels in a specific cultural and institutional context.

3.4.1.2 Semi-structured interviews

Semi-structured interviews were conducted to gain deeper insights into ELT instructors' experiences with AI tools in their teaching practice. This method was chosen for its

flexibility in exploring complex issues, allowing for a detailed examination of instructors' perceptions and practices. The open-ended nature of these interviews provided opportunities to uncover unexpected insights and probe nuanced topics, which is particularly valuable when investigating the integration of novel technologies like AI in education. The semi-structured format enabled the collection of rich, detailed data that cannot be easily quantified by other methods. This approach aligns well with the study's research questions, which seek to understand the benefits, challenges, and adaptations of AI tools across different proficiency levels in ELT. By allowing participants to elaborate on their experiences and beliefs, these interviews provided a nuanced understanding of the complexities associated with AI integration in specific ELT contexts (Nugroho, 2020). This method served as an effective triangulation device, complementing the data obtained from questionnaires and enhancing the overall depth of the study's findings (Raman et al., 2022). The flexibility of semi-structured interviews allowed for the exploration of underlying motivations and practices that shape the use of AI tools in teaching, providing crucial insights that can inform pedagogical practices, curriculum development, and teacher training in the AI era.

3.4.1.3 Open-ended essays

Open-ended essays were employed as a final data collection method, following the questionnaires and semi-structured interviews. This approach allowed for a deeper exploration of ELT instructors' perceptions regarding AI tools in their teaching practices. The open-ended nature of these essays provided participants with the opportunity to express their ideas in detail, offering insights into complex issues that closed-ended questions might not capture (Al-Sohbani, 2016).

This method was particularly valuable in uncovering instructors' beliefs, motivations, and challenges concerning AI integration in English language education. By analyzing the content of these essays, the study aimed to identify recurring themes and patterns, contributing to a more comprehensive understanding of how ELT instructors make decisions about incorporating AI into their teaching. The essays directly addressed the research questions by providing rich, authentic information about the benefits, challenges, and strategies of AI tool integration from the instructors' perspectives. This detailed,

qualitative data not only enhanced the credibility of the research findings but also contributed to the development of evidence-based practices in AI-assisted English language teaching. Moreover, the use of open-ended essays as the final data collection method allowed participants to reflect more deeply on the topics discussed in the earlier stages of the study, potentially revealing new insights or reinforcing key themes identified in the questionnaires and interviews.

3.4.2 Data collection procedure

The study employed a questionnaire, semi-structured individual interviews and open-ended essays as the main 3 step data collection tools. The voluntary nature of participation was always highlighted throughout the data collection process. The total number of the participant instructors is 98 and for the detailed data collection process which are interviews and essays 12 instructors took part in the process.

3.4.2.1 Questionnaire

The researcher prepared the questionnaire questions, which were reviewed and approved by an ELT professional. The questionnaire was designed using Google Forms for easy distribution and accessibility. It contained demographic questions, inquiries about the instructors' familiarity with AI tools, frequency of use, and initial thoughts about AI's role in ELT. Open-ended questions explored specific AI tools, benefits, challenges, strategies, and adaptation for different proficiency levels. The questionnaires were sent to English instructors with an explanation of the purpose and assurance of anonymity and confidentiality. They were administered from March to May of the 2023/2024 academic year, with participants given until the end of May to respond. Reminder emails were sent after one week to enhance participation. Upon conclusion of the response period, the researcher used Google Forms' features to capture and arrange data, aiding in the analysis process. As the study followed an inductive approach, the initial review of findings refined later data collection tools.

3.4.2.2 Individual interviews

The questions for the individual interviews were created based on the emergent data from the questionnaires and were reviewed and approved by an ELT professional. The semi-

structured interviews aimed to delve deeper into instructors' views and experiences regarding AI use in their teaching practices. Twelve volunteer English instructors participated in these interviews, which were conducted individually either in-person or via video conferencing platforms, depending on the participant's preference and availability. Before starting the interviews, the researcher prepared a guideline for the semi-structured interviews, outlining the main topics and issues to be covered. This approach allowed for structure while providing flexibility to explore unexpected insights from respondents.

The interviews lasted 20-35 minutes, giving participants ample time to describe their experiences, challenges, and strategies for incorporating AI in teaching. The researcher built rapport at the beginning of each interview, explained the study's purpose, and guaranteed anonymity and confidentiality. Throughout the interviews, the researcher employed active listening skills and asked for more details or explanations when necessary. Permission was obtained to audio-record the interviews, ensuring accurate transcription and analysis. All interviews were audiotaped and transcribed to create a comprehensive data set. The implementation of semi-structured interviews in this study was purposeful to capture a detailed understanding of how English language instructors perceived and engaged with AI in their teaching practices. By using an interview guide in conjunction with active listening and thematic analysis, the researcher obtained reliable and accurate information from the participants in this emerging and crucial area of AI use in ELT.

3.4.3 Open-ended essays

The researcher introduced open-ended essay questions as a third data collection tool to generate richer data. This method allowed respondents to reflect more deeply on their experiences, views, and opinions regarding AI tools in ELT practice. The open-ended essay part was administered after the questionnaires and semi-structured interviews. All 12 interview participants were invited to this part of the study. They were given a two-week period to write their essays, ensuring enough time for thoughtful reflection and effective expression. The researcher provided guiding questions or prompts to structure the essays while allowing flexibility for participants to explore relevant themes.

Participants submitted their essays electronically as Microsoft Word documents or PDF files. No strict word limits were imposed to encourage expressive and detailed responses. The data from these essays were then triangulated with the questionnaire and interview data to provide a deeper, more comprehensive understanding of the research phenomenon. This triangulation process supported the validation of findings, enhanced the study's credibility, and offered a more vivid, detailed picture of ELT instructors' experiences and perspectives in implementing AI in their teaching practices. The use of open-ended essays as a data collection tool provided an opportunity for respondents to offer elaborate insights into the complexities of AI incorporation in ELT, complementing and supporting the findings from the questionnaires and semi-structured interviews.

3.5 Data Analysis Procedure

The study employed the CCM within a phenomenological framework to analyze data from questionnaires, semi-structured interviews, and open-ended essays. This approach was chosen to explore the lived experiences of ELT instructors using AI tools in teaching.

The analysis process involved:

1. Epoché: The researcher set aside preconceptions about AI in ELT to focus on participants' experiences.
2. Phenomenological reduction: Transcripts were carefully reviewed to identify significant statements, which were then coded using open coding techniques.
3. Axial coding: Relationships among open codes were identified and grouped into categories, constantly comparing data, codes, and categories.
4. Development of descriptions: Textural (what was experienced) and structural (how it was experienced) descriptions were created to construct the essence of the phenomenon.

Atlas.ti software was used to manage and analyze the data. To enhance credibility and trustworthiness, the researcher consulted with an experienced ELT professional knowledgeable in phenomenological research. This approach allowed for the emergence of rich, detailed descriptions, contributing to a comprehensive understanding of AI integration in language teaching and learning.

4. FINDINGS AND DISCUSSION

This chapter firstly presents the findings of the study collected from the questionnaire, semi-structured interview and open-ended essays. The findings are presented in their relation to the research questions. Then, under each respective research question the discussion of the findings are given.

4.1 Findings

The aim of this study was to reveal ELT instructors' perspectives towards the use of AI tools in ELT and how they adjust these tools to accommodate their students' needs in their teaching practice. In the below subchapter the first research question, it's themes and codes are given. For each main theme a table is provided, and the findings are discussed through excerpts from the data.

4.2 Main Research Question 1

Qualitative analysis done on the first research question revealed 1514 codes regarding the perspectives of ELT instructors on using AI tools in their teaching practice. The codes were then grouped under 4 main themes and 16 subthemes. The main themes are as follows: perceived benefits of AI tools (433 codes), challenges encountered with AI tools (426 codes), potential of AI tools in ELT (326), and balancing AI and traditional teaching methods (329 codes). The rest of this section will detailly present each main theme and subtheme by giving excerpts from the collected data.

4.2.1.1 Main theme 1: Perceived benefits of AI tools (426 codes)

The potential of AI tools has been increasingly recognized as improving a number of different aspects of the educational experience in ELT. This theme discusses the expected benefits of AI tools elaborated by ELT instructors, based on qualitative data collected. There were 433 identified codes, reflecting a broad range of positive impacts attributed to the use of AI in the classroom.

Table 1. Key benefits of AI in ELT

Theme	Sub-theme	Number of Codes	Key Points
Benefits of AI Tools in ELT	Improved Teaching Efficiency	113	Reduced administrative workload More time for innovative teaching
	Enhanced Learning Experience	112	Immersive, authentic environments Instant feedback
	Personalized Learning	105	Customized materials and assessments Tailored learning paths
	Increased Student Motivation and Engagement	103	Interactive, gamified lessons Higher engagement
Total Identified Codes		**433**	

Each sub-theme will be covered in depth in the sections that follow along with samples of the information gathered via questionnaire, interviews, and essays. To give a thorough picture of how ELT instructors view the advantages of using AI tools in their teaching practices these excerpts will be examined.

Subtheme 1: Improved teaching efficiency (113 codes)

Based on the 113 codes found in this subtheme, it is evident that the use of AI tools in ELT has resulted in significantly higher teaching efficiency. The accumulated data presented two main mechanisms: administrative tasks automation and personalized learning experiences facilitation.

One major advantage that has emerged is the ability for instructors to shift their focus to more substantive aspects of teaching thanks to the automation of administrative tasks. As Instructor 77 noted:

"AI tools have streamlined administrative tasks, allowing me to focus more on teaching. Automated grading of quizzes, for example, has saved a lot of time and provided immediate results to students" (I.77).

The overall learning process is improved by this automation which also saves time and offers quick feedback.

Facilitating individualized learning experiences is the second important component of increased efficiency. Multiple instructors highlighted this benefit:

"AI has helped me address individual student needs more effectively. The tailored exercises keep them engaged and support their specific learning goals" (I.49).

This sentiment was echoed and expanded upon by another Instructor 6:

"The biggest benefit, I would say, is the personalized learning experience. AI tools can cater to individual students' strengths and weaknesses, which is something really hard to do in a traditional classroom setting" (I.6).

These statements underscore the capacity of AI to provide tailored instruction at a scale that would be challenging, if not impossible, in traditional teaching settings.

Remarkably the advantages of individualized instruction and efficient administration seem to be linked with improved student involvement as the end result. As Instructor 32 observed:

"AI tools have enhanced student engagement and personalized learning experiences, especially noticeable in improved student participation" (I.32).

In summary, AI tools in ELT improve teaching efficiency by automating administrative tasks and creating personalized learning experiences which raise student engagement.

This implies that AI is not only making things more convenient but also fundamentally changing ELT instruction.

Subtheme 2: Enhanced learning experience (112 codes)

The excerpts related to first subtheme presents that students now have much better more immersive dynamic and engaging learning experiences thanks to the use of AI tools in ELT. ELT instructors have seen that AI improves the learning environment in a number of ways most notably by providing instant feedback and realistic practice scenarios which are two essential components of successful language learning.

Instructor 1 highlighted the personalized learning benefits of AI:

> The most significant benefit I've noticed from integrating AI in teaching is the personalized learning experience it offers. For example, AI-driven platforms can adapt to each student's learning pace, providing targeted exercises to address specific areas of improvement. This adaptive learning approach has been particularly effective in improving students' language proficiency, as it allows for more focused and efficient learning (I.1).

Instructor 7 pointed out AIs capacity to deliver consistent feedback greatly improves this individualized approach:

"AI tools have drastically improved efficiency in managing classroom activities and tracking student progress. I find that time to time AI provides consistent feedback which helps in maintaining objectivity, especially in assessments" (I.2).

While both of these quotes emphasize the efficiency and personalization that AI brings to language learning the following quote highlights how AI can make learning more engaging and relevant:

"Using AI in my classes has made learning fun and immersive. The students are more motivated to participate when the practice is engaging and feels relevant to real-world scenarios" (I.5).

Students are not only motivated by this immersive approach, but they can also use their language skills in real-world situations. However, as Instructor 6 notes there are some difficulties and factors to take into account when integrating AI into ELT:

> (…) I have witnessed firsthand the rapid evolution of technology and its impact on language teaching. When I first encountered AI tools designed for language education, I was both intrigued and apprehensive. On one hand, I saw the potential for these tools to revolutionize the way we teach and learn languages, offering personalized learning experiences and real-time feedback. On the other hand, I questioned whether AI could truly replace the human touch and the nuanced understanding that experienced teachers bring to the classroom (I.6).

This contemplation sheds light on the current discussion concerning how to balance the advancement of technology with the indispensable human component in education. Despite these concerns, the tangible benefits of AI in improving specific language skills are evident, as Instructor 5 pointed out:

> The biggest benefit I've observed from using AI in my teaching is the personalized feedback. AI tools can provide immediate, detailed feedback that is tailored to each student's needs. This has significantly improved my students' writing skills. They feel more confident and motivated because they can see their progress in real-time. It's like having a personal tutor available 24/7 (I.5).

Subtheme 3: Personalized learning (105 codes)

Personalized learning is one of the main benefits of using AI tools in ELT. These resources address each students' distinct needs and learning style which can be difficult in a traditional classroom setting. They also offer personalized feedback and flexible learning opportunities.

Instructor 65 highlighted the efficiency of AI in providing personalized and instant feedback:

> One clear benefit is the individualized feedback it can provide, which is quite time efficient. For example, AI tools have helped the grading process for written assignments by providing preliminary feedback that students can use to improve their drafts before final submission (I.65).

This efficient feedback process is complemented by AI's ability to cater to individual strengths and weaknesses, as Instructor 77 noted:

> AI tools can cater to individual students' strengths and weaknesses, which is something really hard to do in a traditional classroom setting. For instance, one of my students who struggled with speaking skills improved significantly because the AI provided continuous, instant feedback and allowed her to practice at her own pace (I.77).

The adaptive nature of AI tools is further emphasized by Instructor 33:

"AI tools adapt to each student's learning pace and style. One of my students, who struggled with traditional methods, showed remarkable improvement when we switched to AI-based personalized exercises" (I.33).

While the previous quotes focus on individual skill improvement, the following quote highlights how AI creates personalized learning paths:

"The ability of AI to provide customized learning paths has been a game-changer. It ensures that each student gets the attention and resources they need to succeed" (I.41).

This personalization extends to addressing diverse student needs, as Instructor 12 elaborated:

> One of the most significant advantages is the personalization and differentiation of instruction that AI tools can provide. For instance, I have used AI-powered language learning platforms that adapt to each student's proficiency level, learning style, and pace, offering them tailored lessons and activities. This has allowed me to cater to the diverse needs of my students and ensure that everyone is making progress (I.12).

Subtheme 4: Increased student motivation and engagement (103 codes)

As indicated by the 103 codes found in this subtheme the use of AI tools in ELT has significantly increased student motivation and engagement. Three key factors—gamification personalization and interaction and instantaneous feedback—are evident in the data as causes of this increase.

Gamification emerges as a potent motivator in AI-enhanced ELT. Instructor 7 highlighted its impact:

"The gamification elements in AI tools have made learning more enjoyable and less stressful for students. They are more motivated to engage with the content when it feels like a game" (I.7).

This quote demonstrates how gamification can improve learning by lowering stress and increasing enjoyment all of which improve student engagement.

Interactivity and personalization are also significant in enhancing learners' motivation. As Instructor 22 noted:

"AI tools have made lessons more interactive and personalized, particularly evident in increased student engagement and participation" (I.22).

This finding implies that AI technologies have the ability to design more customized and dynamic learning environments which will inevitably result in higher student engagement.

The ability of AI tools to provide immediate feedback is another key factor in enhancing student motivation. Instructor 7 observed:

"Students appreciate the immediate feedback and the ability to practice outside of class. This has increased their motivation to learn and engage with the material" (I.7).

This comment highlights how AI tools extend learning beyond the classroom, providing students with opportunities for continuous practice and improvement.

However, it's important to note that the integration of AI tools is not without challenges. Instructor 18 provided a more nuanced perspective:

"The feedback has been mostly positive. Students like the convenience of using AI tools for practice, but some miss the human touch and interactive discussions we usually have in class" (I.19).

Although AI tools are very beneficial in terms of convenience and practice opportunities, this balanced viewpoint suggests that they might not be able to completely replace the value of human interaction in language learning.

Gamification interactivity personalization and instant feedback are some of the ways that AI tools in ELT increase student motivation. However, the best strategy for increasing student engagement in language learning may be a well-balanced approach that combines AI tools with human interaction.

4.2.1.2 Main theme 2: Challenges encountered with AI tools (426 codes)

While there are many advantages to integrating ELT there are also a number of obstacles that educators must overcome. The numerous challenges that ELT instructors encounter when integrating AI into their teaching practices are explored in this theme which is backed by 426 codes. For effective strategies to maximize the benefits of AI tools while minimizing their drawbacks it is imperative to comprehend these challenges.

Table 2. Challenges of AI in ELT

Theme	Sub-theme	Number of Codes	Key Points
Challenges encountered with AI Tool	Practical Constraints	108	Connectivity issues and software bugs, Initial learning curve for efficient use
	Ethical and Privacy Concerns	108	Data privacy issues, Potential for biased outcomes
	Human Element and Interaction	108	Reduced interpersonal interaction, Potential dehumanization of education
	Over-reliance and Misuse	102	Risk of neglecting fundamental language skills, Insufficient human oversight
Total Identified Codes		**426**	

In the sections that follow, each sub-theme will be discussed with excerpts from questionnaire data, interviews, and essays. The board understanding of the challenges ELT instructors face with AI tools is analyzed, offering insights into how these obstacles can be addressed for the optimization of the employment of AI in language teaching.

Subtheme 1: Practical Constraints **(108 Codes):**

The integration of AI tools in ELT has brought various practical constraints as evidenced by 108 codes identified in this subtheme. These challenges can be categorized into four main areas: reliability issues, learning curve, financial barriers, and limitations in human interaction.

Reliability issues were highlighted as a significant concern:

"Sometimes, AI tools can be unreliable due to software glitches or connectivity problems. This disrupts the learning process and can be quite frustrating for both students and teachers" (I.15).

The steep learning curve for both instructors and students emerged as another key challenge:

"The initial learning curve for both students and instructors can be steep. It takes time to understand how to use these tools effectively" (I.22).

This sentiment was echoed by Instructor 7 who addressed the issue through gradual implementation:

> One major issue was the initial resistance from students. Some were hesitant to use the technology, perhaps intimidated by it or skeptical of its effectiveness. To address this, I started incorporating AI tools gradually and provided lots of support and demonstrations (I.7).

Financial barriers were also identified as a significant obstacle:

"The biggest challenge is the requirement to make a payment to be able to use the PRO form the site. Sometimes it doesn't perceive what you want it to do" (I.26).

Lastly, the limitations of AI in replicating human interaction were noted:

> One of the main challenges is the lack of human touch and empathy that AI tools can provide. I have found that my students still need and value my guidance,

> support, and feedback, as well as the social and emotional interactions that occur in a classroom setting (I.13).

While AI tools definitely fit well in ELT, many technical challenges exist. Some of these are with regard to consistency problems, steep learning curves, concerns with regard to costs, and limits in replicating human interaction. These are the problems that have to be fixed if AI is to be successfully integrated into ELT.

Subtheme 2: Ethical and privacy concerns (108 codes):

The integration of AI tools in ELT has raised significant ethical and privacy concerns, as evidenced by 108 codes identified in this subtheme. These concerns primarily fall into three categories: data privacy, ethical use of AI, and potential algorithmic biases.

Data privacy emerged as a primary concern among instructors:

> The use of AI tools raises significant privacy concerns for me, especially regarding the collection and storage of student data which is something I have hard time to trust. It needs to be assured that the data is carefully stored, it's crucial to ensure that these tools comply with data protection regulations (I.26).

This concern was echoed by Instructor 44 who took proactive measures:

"Managing student data privacy with AI tools was a concern. I followed strict data privacy guidelines and informed students about data usage" (I.44).

Ethical considerations in the use of AI were also prominently discussed:

"Ethical concerns are also prominent, particularly in terms of how AI algorithms might influence teaching practices and decisions. It's important to use AI responsibly and ethically" (I.19).

Instructor 15 highlighted the challenge of balancing AI use with traditional methods:

"One of the main challenges has been ensuring that AI tools are used ethically and that they complement traditional teaching methods without replacing them" (I.15).

The potential for bias in AI algorithms was another significant concern:

"I've had to be mindful of the potential for bias in AI algorithms. I've made sure to use a variety of tools from different sources to ensure that my students are getting a well-rounded education" (I.33).

As a result, even though AI tools are useful for ELT there are serious ethical and privacy issues with them. These include concerns about data privacy the requirement for using AI in a responsible and moral manner and the possibility of algorithmic bias. Resolving these issues is essential to the ethical incorporation of AI in ELT.

Subtheme 3: Human element and interaction (108 codes):

While AI tools offer numerous benefits in ELT, the importance of the human element and interaction remains paramount, as evidenced by 102 codes identified in this subtheme. The data highlights three key aspects: irreplaceable human qualities, limitations of AI-generated content, and the need for a balanced approach.

The irreplaceable nature of human qualities in teaching was emphasized by several instructors like Instructor 21:

"While AI tools are helpful, they cannot replace the human touch and interaction that is crucial in teaching. The empathy, creativity, and cultural understanding that teachers bring to the classroom are irreplaceable" (I.21).

Limitations of AI-generated content were also noted by one instructor:

"AI-generated content can sometimes lack the cultural authenticity and human creativity that are essential in language teaching" (I.87).

Instructors discussed strategies for balancing AI use with human interaction:

"I started balancing the use of AI tools with more interactive, group-based activities during class. This way, they get the best of both worlds—personalized AI support and the human interaction they crave" (I.36).

The importance of a balanced approach was further emphasized:

> The most effective approach was to use AI as a complementary tool, enhancing rather than replacing traditional teaching methods. I tried to create this balance to ensure that my students still received the empathy, creativity, and cultural understanding that I, a human teacher, provide (I.12).

In conclusion, even though AI technologies have a lot to offer ELT, human interaction is still necessary for a successful learning experience. The best method for incorporating AI into ELT seems to be a well-rounded approach that makes use of AI capabilities while maintaining crucial human interactions.

Subtheme 4: Over-reliance and misuse (102 codes):

The inclusion of AI tools in ELT has sparked worries about overuse and reliance as shown by the 102 codes included in this subtheme. The possible harm to students' capacity for independent thought language acquisition and critical thought is the main focus of these worries.

The risk of over-reliance on AI tools was a recurring theme among participants:

"There is a risk of students becoming overly reliant on AI tools, which can hinder the development of their independent thinking and problem-solving skills" (I.17).

This concern was echoed and expanded upon by Instructor 3:

"Some students have become too dependent on AI-powered tools, such as translation and grammar-checking tools, and have neglected to develop their own language skills" (I.3).

Misuse of AI tools was another significant concern, particularly in relation to academic integrity:

"AI tools are sometimes misused, with students relying on them for tasks they should be doing themselves, like writing assignments or solving problems" (I.14).

Instructors also highlighted the challenge of selecting effective AI tools amidst a sea of options:

"One of the biggest challenges has been finding AI tools that are truly effective and engaging. There are a lot of gimmicky tools out there, and it can be difficult to separate the wheat from the chaff" (I.92).

The potential impact on critical thinking and creativity was also noted:

"There is always a risk of students misusing AI tools, especially for tasks that require critical thinking and creativity" (I.1).

In conclusion, even though AI tools are beneficial for ELT there are serious worries about the possibility of over-reliance and misuse. These problems may impede students' capacity for critical thought language proficiency and independent thought. To successfully and responsibly integrate AI in ELT these issues must be resolved.

4.2.1.3 Main theme 3: Potential of AI tools in ELT (362 codes)

AI tools have a wide range of applications in ELT The possibilities that AI presents for transforming language education through personalized and adaptive learning innovative teaching methods and international cooperation are explored in this theme which is backed by 362 codes. Using AI tools to improve teaching and learning in ELT requires an understanding of their potential.

Table 3. Future potential of AI in ELT

Theme	Sub-theme	Number of Codes	Key Points
Potential of AI tools in ELT	Adaptive and Personalized Learning	95	Real-time analysis and continuous feedback, Personalized learning plans
	Innovative Educational Approaches	94	AI-generated content and virtual reality, NLP and AI-powered writing tools
	Transformative Impact	90	Revolutionary teaching and learning method, More interactive and engaging learning experiences
	Facilitating Global Collaboration	83	Connecting students with native speakers, Enhancing global dimensions of language learning
Total Identified Codes		**362**	

Each sub-theme will be covered in detail in the sections that follow along with samples of the information gathered from essays, interviews and questionnaire. These extracts will be examined to provide thorough grasp of the potential applications of AI tools in ELT and suggestions for how best to integrate these tools to enhance the learning process.

Subtheme 1: Adaptive and personalized learning (95 codes):

AI-driven platforms in ELT are revolutionizing the learning experience by adapting to each student's unique needs, pace, and proficiency. This subtheme, supported by 95 codes, examines how personalized learning experiences facilitated by AI can enhance educational outcomes.

Instructor 17 highlighted the adaptive nature of AI platforms:

"These new AI platforms offer impressive things for students because they can adapt to each student's learning pace, providing targeted exercises to address specific areas of improvement" (I.17).

This quotation emphasizes how AI can offer customized instruction. AI tools can provide a degree of personalization that would be difficult to accomplish in a traditional classroom setting by adapting to each student's pace and focusing on particular areas for improvement. With the potential to accelerate learning this adaptive approach guarantees that every student receives the right challenges and assistance.

Instructor 19 expressed enthusiasm for AI's potential in personalized learning:

> When I think about using AI tools in my work, I'm intrigued by the potential for personalized learning experiences. My experience shows that AI can analyze students' language abilities in real-time, offering tailored exercises that cater to their individual needs, strengths, and weaknesses (I.19).

This viewpoint emphasizes AIs real-time analytical power. One of the biggest developments in educational technology is the capacity to continuously evaluate a student's performance and instantly modify the course material. The learning experiences that result from this real-time adaptation may be more productive and successful.

Instructor 41 emphasized the personalized learning experience as a key benefit:

> The biggest benefit, I would say, is the personalized learning experience. AI tools can cater to individual students' strengths and weaknesses, which is something really hard to do in a traditional classroom setting and is a challenge for many teachers like myself (I.41).

This quote sums up the challenge of providing individual attention in a traditional classroom and how AI tools can help alleviate this limitation. By catering to the individual students' strengths and weaknesses, AI could be able to provide an overall better learning experience and make things fair, by providing what each student needs.

Instructor 32 discussed the use of AI tools for lower-level students:

> My beginner students of course want to learn new vocabulary items as it is very crucial, I use AI tools that focus on basic grammar and vocabulary. There's a particular app that gamifies language learning, which they love and it’s called Gibbly (I.32).

This example shows how AI can be especially helpful for students who might find it difficult to learn using traditional teaching methods. AI technologies can improve learning by adding gamification components which may boost lower-level students’ motivation and retention.

Instructor 32 elaborated on the advantages of AI-powered personalization:

> One of the most significant advantages is the personalization and differentiation of instruction that AI tools can provide. For instance, I have used AI-powered language learning platforms that adapt to each student's proficiency level, learning style, and pace, offering them tailored lessons and activities (I.23).

This detailed statement demonstrates how AI can simultaneously address pace learning style and proficiency level in several areas of personalization. Learning experiences that are more comprehensive and productive may result from this multifaceted approach to customization.

Finally, Instructor 3 emphasized the impact of immediate, detailed feedback:

"AI tools can provide immediate, detailed feedback that is tailored to each student's needs. This has significantly improved my students' writing skills. They feel more confident and motivated because they can see their progress in real-time" (I.3).

The motivational value of AI-powered feedback is emphasized in this quote. Giving prompt thorough and tailored feedback not only enhances proficiency but also increases motivation and confidence—two essential components of a successful language learning experience.

Ultimately a degree of personalized and adaptive learning that was previously unattainable in ELT is now possible thanks to AI-driven platforms. These tools are changing the educational landscape and may provide answers to persistent problems with personalized instruction. They range from real-time analysis and adaptation to gamified learning experiences and instant feedback.

Subtheme 2: Innovative educational approaches (94 codes):

AI tools are bringing new approaches to ELT providing fresh ways to improve learning with cutting-edge technologies. This subtheme which is backed by 94 codes examines the ways in which artificial intelligence-powered tools are changing conventional language instruction.

The potential of AI-powered pronunciation and speech recognition tools was highlighted:

"AI-powered pronunciation and speech recognition tools offer impressing ways to provide students with immediate, targeted feedback which is very cool to experience" (I.7).

This immediate feedback allows real-time correction and improvement of pronunciation and speech skills, addressing a common challenge in language classrooms.

AI tools for realistic practice were also noted:

"AI tools like chatbots and virtual assistants could provide students with opportunities to practice their language skills in realistic, low-stress environments" (I.42).

These AI-powered environments offer safe, judgment-free spaces for language practice, potentially reducing anxiety and increasing confidence in learners.

Instructor 76 shared practical experiences with AI tools:

"One of the first tools I implemented was an AI-powered writing assistant. My students were initially hesitant, but they quickly warmed up to it when they saw how it could help them improve their grammar and vocabulary" (I.76).

This experience highlights the initial resistance often faced when introducing new technologies, but also demonstrates how quickly students can adapt when they see tangible benefits.

The impact of AI-powered chatbots was significant:

"I started using AI-powered chatbots for conversation practice. This was a game-changer for my students, as it allowed them to practice speaking English in a safe and supportive environment" (I.2).

Chatbots provide a unique opportunity for students to engage in conversational practice without the pressure of human interaction.

AI's ability to personalize learning was emphasized:

> I have used AI-powered language learning platforms that adapt to each student's proficiency level, learning style, and pace, offering them tailored lessons and activities. This has allowed me to cater to the diverse needs of my students and ensure that everyone is making progress (I.16).

This personalized approach addresses the challenge of catering to diverse learning needs in traditional classrooms.

The collaborative and creative potential of AI tools was also highlighted:

"AI tools can foster collaboration, creativity, and critical thinking among my students. I have used AI-powered tools that allow my students to work together on projects, such as creating multimedia presentations or interactive stories" (I.3).

This suggests that AI tools can go beyond mere language instruction to foster 21st-century skills.

In conclusion, AI tools are bringing fresh perspectives to ELT by providing personalized learning realistic practice environments instant feedback and chances for inventive and collaborative learning. These tools are not only improving conventional language learning techniques but also bringing in fresh paradigms of teaching that tackle persistent issues in language learning.

Subtheme 3: Transformative impact (90 codes):

With new ways to improve and customize the learning process AI tools have the potential to change ELT. Backed by 90 codes, this subtheme explores how AI can transform language instruction while preserving a balance with crucial human components.

Instructor 20 briefly captured the dual nature of this transformation:

"AI could revolutionize ELT, but we must strike a balance between innovation and preserving the human elements of learning" (I.20).

This quotation recognizes the need to preserve human components in education while highlighting the revolutionary potential of AI, this attitude has been seen in many other excerpts from the instructors. In order to ensure that technological advancements complement rather than replace the essential components of human interaction in learning it is suggested that the integration of AI in ELT be approached thoughtfully.

Instructor 14 expressed a bold vision for the future of education:

"I believe that future form of teaching will be shaped by AI" (I.14).

This excerpt shows a strong conviction in AIs ability to revolutionize instructional strategies. It implies that in the years to come AI will radically change educational practices and not only be a supporting tool.

Instructor 1 also shared their anticipation for more advanced AI tools:

"Looking ahead, I think AI will become even more integral to language teaching. I hope to see more sophisticated tools that can handle nuanced language aspects, like idiomatic expressions and cultural contexts" (I.1).

The quote unveils the expectation that AI will go beyond basic language instruction, handling some of the more complex facets of language learning. This shows that, at present, AI has to grow further in pickups on linguistic subtleties and cultural contexts—areas in which humans are traditionally relied upon for judgment.

Instructor 3 echoed this sentiment:

> I see AI becoming an integral part of language teaching. I hope to see more sophisticated tools that can understand and generate natural language even better, this way when using these tools teachers won't have to consistently worry about the outputs (I.3).

This further underpins the expectation for the progress AI is going to make in natural language processing, indicating a future when AI will express itself more naturally with language learners.

Instructor 56 reflected on their personal journey with AI in ELT:

> My journey with AI in my profession has been one of exploration, challenge, and growth. For sure, I believe the road ahead is not without its obstacles, I mean it's hard to sometimes accept these big changes. But I am excited by the possibilities that AI offers for language education, and I am committed to finding ways to harness its potential in a way that benefits all learners. I'll do my best to make use of AI so that my students can also benefit from it (I.56).

This reflection sheds light on the fluid process of incorporating artificial intelligence into instructional strategies. In addition to expressing excitement for the potential advantages, it acknowledges the difficulties involved and emphasizes educators' dedication to utilizing AI to the advantage of all students.

Finally, Instructor 63 expressed optimism about AI's future in language learning:

"I believe that AI has the potential to transform language learning for the better. It's an exciting time to be in education, and I'm looking forward to seeing how these tools continue to evolve" (I.63).

This quotation perfectly captures the general feeling of excitement and expectation surrounding the use of AI in ELT. It implies that teachers view AI as a catalyst for positive change in language education rather than merely as a tool.

Although AI tools exhibit considerable promise to revolutionize ELT, educators stress the significance of striking a balance between technological advancement and the indispensable human component of instruction. The desire for increasingly complex AI tools that can manage the subtleties of language acquisition is restrained by the understanding that human interaction in education must continue.

Subtheme 4: Facilitating global collaboration (83 codes):

Through the use of AI tools global collaboration in ELT is being made possible giving students the chance to interact with native speakers and practice their language skills in a real-world setting. This subtheme which has 102 codes investigates the ways in which AI-powered platforms facilitate language communication promote a feeling of international community and improve student involvement and teamwork.

Instructor 75 expressed cautious optimism about using AI for language exchange:

"I'm cautiously optimistic about using AI to facilitate language exchange and connect my students with native speakers around the world. While this could provide authentic practice opportunities, I'll need to establish clear guidelines and monitor interactions closely" (I.75).

The quote illustrates what AI can do in bridging geographical gaps to authentic language practice. On the other hand, it also projects a critical element of the implementation and oversight that would otherwise indicate that, even when AI can facilitate global connections, it does require thoughtful management to ensure safety and productivity of interactions.

Instructor 86 emphasized the positive impact of AI-powered language exchange platforms:

"AI-powered language exchange platforms have helped my students feel more connected to the global English-speaking community. They're having authentic conversations with people from all over the world, which is really exciting to see" (I.86).

This statement shows how AI tools give language learners a sense of global community by facilitating real conversations with people around the world, realizing key real-world language practice outside the traditional classroom.

Instructor 32 reflected on the collaborative benefits of AI:

> AI tools have facilitated more collaborative learning experiences, encouraging students to work together on projects and assignments. The integration of AI in my classroom has fostered a more engaging and interactive learning environment, which has been well-received by my students (I.32).

This quote emphasizes AI's role in fostering collaboration and interaction among students. It suggests that AI tools can transform the classroom dynamic, creating more opportunities for peer-to-peer learning and engagement.

By promoting language exchange building a sense of global community and raising student participation and engagement AI tools are dramatically improving global collaboration in ELT. In order to ensure safe and effective use these tools must be implemented with great thought and oversight. They present exciting opportunities for collaborative learning and authentic language practice.

4.2.1.4 Main theme 4: Balancing AI and traditional teaching methods (329 codes)

In the evolving landscape of ELT, the integration of AI tools presents both opportunities and challenges. While AI offers numerous benefits, such as personalized learning and improved teaching efficiency, it is crucial to balance these advantages with the irreplaceable human elements inherent in traditional teaching methods. This theme, supported by 329 codes, explores the necessity of blending AI with conventional pedagogical strategies to create a holistic and effective learning environment.

Table 4. Balancing AI and traditional teaching methods in ELT

Theme	Sub-theme	Number of Codes	Key Points
Balancing AI and Traditional Methods	Integrating AI with Pedagogical Strategies	89	Thoughtful incorporation of AI into teaching practices, Enhancing traditional methods while maintaining human touch
	Ensuring Equity and Accessibility	82	Addressing the digital divide, Providing alternatives for equal benefit
	Maintaining Human Touch and Creativity	79	Preserving essential human interaction and emotional support, Using AI to enhance, not replace, human teachers
	Continuous Evaluation and Adaptation	79	Ongoing assessment of AI integration, Adapting AI tools to meet evolving needs
Total Identified Codes		**329**	

Each subtheme will be discussed in detail, presenting excerpts from participant questionnaire, interviews, and open-ended essays to provide a comprehensive understanding of how to balance AI and traditional teaching methods. The discussion will illustrate the significance of integrating AI in a way that complements human teaching, ensures equitable access, maintains the essential human elements, and requires continuous evaluation and adaptation. By doing so, educators can leverage the strengths of both AI and traditional methods to create an enriching and effective learning experience for all students.

Subtheme 1: Integrating AI with pedagogical strategies (89 codes):

Integrating AI tools into pedagogical strategies is crucial for enhancing ELT while maintaining the essential human elements that traditional methods provide. This subtheme, supported by 89 codes, explores the thoughtful incorporation of AI as a complementary tool to augment traditional teaching methods.

Instructor 2 emphasized the need for balance:

"AI could revolutionize ELT, but we must strike a balance between innovation and preserving the human elements of learning by highlighting pedagody" (I.2).

This quote underscores the transformative potential of AI while recognizing the irreplaceable value of human elements in education. It suggests that the integration of AI should be approached as a complementary enhancement rather than a replacement for traditional teaching methods.

Instructor 35 expressed cautious optimism:

"I'm cautiously optimistic about AI, but we need to be thoughtful in how we integrate it into our teaching practice" (I.35).

This statement reflects a nuanced perspective on AI integration, acknowledging its potential benefits while emphasizing the need for careful consideration in its implementation. It highlights the importance of a strategic approach to ensure AI enhances rather than disrupts effective teaching practices.

Instructor 27 highlighted the limitations of AI and the importance of using it as a supplementary tool:

"One challenge is definitely the lack of personal touch. AI can be very rigid and doesn't adapt well to unexpected situations. I addressed this by using AI tools only as a supplement, rather than a replacement" (I.27).

This observation points out a crucial limitation of AI - its lack of adaptability in unpredictable situations. The instructor's approach of using AI as a supplement rather than a replacement demonstrates a practical strategy for leveraging AI's strengths while mitigating its weaknesses.

Instructor 61 found success in using AI as a complement to traditional methods:

"I found that the most effective approach was to use AI as a complementary tool, enhancing rather than replacing traditional teaching methods" (I.61).

This perspective reinforces the idea of AI as an enhancement to, rather than a replacement for, traditional teaching methods. It suggests that the most effective use of AI in ELT involves a synergistic approach that combines technological innovation with established pedagogical practices.

Instructor 32 reflected on their evolving perception of AI:

> While I initially viewed AI as a potential threat to traditional teaching methods, I now see it as a powerful tool that can enhance and transform the way we teach and learn languages. However, I also believe that the human element remains essential, and that the most effective language learning occurs when technology is leveraged in conjunction with the expertise and empathy of qualified, experienced teachers (I.32).

This reflection captures the journey many educators may experience in adopting AI - from initial skepticism to recognizing its potential as a transformative tool. It also reaffirms the critical role of human teachers in providing expertise and empathy that AI cannot replicate.

In conclusion, the integration of AI with pedagogical strategies in ELT requires a balanced and thoughtful approach. While AI offers significant benefits such as personalized feedback and enhanced learning experiences, educators emphasize the importance of preserving the human elements of teaching. The most effective strategies appear to involve using AI as a complementary tool to augment, rather than replace, traditional teaching methods.

Subtheme 2: Ensuring Equity and Accessibility (82 codes):

Incorporating AI tools into ELT poses significant challenges in terms of ensuring equity and accessibility for all students. This subtheme, supported by 82 codes, addresses the potential risks of widening the digital divide and the need for educators to advocate for equitable access.

Instructor 26 expressed concern about exacerbating the digital divide:

> I worry that the adoption of AI tools in language teaching may widen the digital divide and disadvantage students with limited access to technology. As an educator, I always try to advocate for equitable access and provide alternative learning options (I.26).

This quote highlights a critical concern in the implementation of AI in ELT - the potential to disadvantage students with limited technological access. It also emphasizes the educator's responsibility to advocate for equitable access and provide alternative learning options, suggesting that the integration of AI should not come at the cost of excluding certain student populations.

Instructor 84 underscored the importance of personal connections:

"AI can help streamline certain aspects of teaching, but the personal connection between teacher and student will always be vital in my opinion" (I.84).

This statement reminds us that while AI can enhance certain aspects of teaching, it should not replace the crucial personal relationships between teachers and students. It suggests

that the integration of AI should be balanced with maintaining strong interpersonal connections in the learning environment.

Instructor 19 emphasized the need for comprehensive support systems:

> Ensuring that all students had equal access to the technology and the digital literacy skills needed to benefit from AI-assisted learning required a significant investment in professional development for teachers, as well as collaboration with IT departments and administrators to provide the necessary infrastructure and support (I.19).

This quote highlights the multi-faceted approach required to ensure equitable access to AI tools. It suggests that successful integration of AI in ELT requires not just the technology itself, but also investment in teacher training, IT infrastructure, and administrative support.

Instructor 88 pointed out financial barriers:

"The cost of some AI tools was unaffordable. I sought free or affordable alternatives" (I.88)

This statement brings attention to the financial aspect of AI integration, highlighting that cost can be a significant barrier to access. It also demonstrates the proactive approach of seeking affordable alternatives, suggesting that educators play a crucial role in finding accessible solutions.

Instructor 4 shared their approach to ensuring equitable access:

"Ensuring equitable access to AI tools for all students was difficult. I provided alternatives for students without access to technology" (I.4).

This quote illustrates the practical challenges of ensuring equity in AI-assisted learning and demonstrates the importance of providing alternative learning options. It suggests that educators need to be flexible and resourceful in their approach to ensure all students can benefit from AI integration.

Finally, Instructor 65 discussed the challenge of managing AI-generated data:

"AI tools sometimes generate too much data, making it overwhelming. I streamlined the data and focused on key insights" (I.65).

This statement highlights a different aspect of accessibility - the need to make AI-generated information manageable and useful. It suggests that educators play a crucial role in interpreting and streamlining AI-generated data to enhance learning outcomes effectively.

In conclusion, ensuring equity and accessibility in the integration of AI tools in ELT requires a multi-faceted approach. Educators must advocate for equitable access, provide alternative learning options, invest in comprehensive support systems, seek affordable solutions, and effectively manage AI-generated data. These efforts are crucial to prevent the widening of the digital divide and ensure that all students can benefit from AI-assisted learning.

Subtheme 3: Maintaining human touch and creativity (79 codes):

Maintaining the human touch and fostering creativity in the classroom are critical elements that AI tools cannot fully replicate. This subtheme, supported by 79 codes, explores the concerns and strategies related to preserving the essential human elements of teaching, such as empathy, cultural authenticity, and interactive discussions.

Instructor 9 expressed concern about the potential loss of cultural authenticity:

"AI-generated practice materials could add variety, but I worry about the loss of cultural authenticity and human creativity" (I.9).

This quote highlights a key concern in the integration of AI in ELT - the potential loss of cultural nuance and human creativity. It suggests that while AI can provide diverse materials, it may lack the depth of cultural understanding and creative insight that human teachers bring to their lessons.

Instructor 10 emphasized the importance of human oversight:

> I believe AI-generated content, such as practice dialogues and writing prompts, could add variety and interest to my lessons. However, I always feel like I must carefully review the content for accuracy, appropriateness, and potential biases before using it in class" (I.10).

This statement underscores the critical role of human teachers in curating AI-generated content. It suggests that while AI can produce varied materials, human judgment remains essential in ensuring these materials are accurate, appropriate, and free from bias.

Instructor 41 shared their strategy for balancing AI use with human interaction:

> Students who had experience using some AI tools, mentioned that they missed the human touch and the interactive discussions we usually have in class. Based on this feedback, I started balancing the use of AI tools with more interactive, group-based activities during class (I.41).

This quote illustrates the importance of maintaining interactive, human-led activities alongside AI tools. It suggests that students value the social and interactive aspects of learning that human teachers facilitate, and that a balanced approach is necessary for effective learning.

Instructor 25 highlighted the irreplaceable value of human interaction:

"I guess I'd just emphasize that while AI has its place, we shouldn't forget the value of human interaction in teaching. It's the connection and understanding between teacher and student that really drives learning, in my opinion" (I.25).

This statement reinforces the crucial role of the teacher-student relationship in the learning process. It suggests that the emotional connection and mutual understanding between teachers and students are fundamental drivers of effective learning that AI cannot replicate.

Instructor 46 reflected on the limitations of AI tools:

> Despite the numerous benefits of AI tools, I have also encountered several challenges and limitations. One of the main challenges is the lack of human touch and empathy that AI tools can provide. I have found that my students still need and value my guidance, support, and feedback, as well as the social and emotional interactions that occur in a classroom setting (I.46).

This comprehensive reflection highlights the multifaceted role of human teachers that AI tools cannot fully replicate. It emphasizes the importance of emotional support, personalized guidance, and social interactions in the learning process.

Finally, Instructor 43 asserted the primacy of human teachers:

"AI tools can provide valuable support, but the primary teaching role should remain with the human teacher" (I.43).

This succinct statement encapsulates the overall sentiment of this subtheme - that while AI tools can offer valuable support, they should complement rather than replace human teachers.

In conclusion, while AI tools offer significant benefits in ELT, maintaining the human touch and creativity remains crucial. Educators emphasize the importance of cultural authenticity, human oversight, interactive discussions, and emotional support that only human teachers can provide. The most effective approach appears to be a balance between leveraging AI capabilities and preserving the irreplaceable qualities of human teaching.

Subtheme 4: Continuous evaluation and adaptation (102 codes):

Continuous evaluation and adaptation are essential for the effective integration of AI tools in ELT. This subtheme, supported by 102 codes, explores the ongoing process of assessing the impact of AI tools, providing regular professional development, and updating AI systems.

Instructor 63 emphasized the irreplaceable role of human teachers:

"While AI has benefits, I believe human teachers are irreplaceable for providing context, support, and connection" (I.63).

This quote underscores the enduring importance of human teachers in the age of AI. It suggests that while AI tools can offer valuable benefits, they cannot fully replicate the contextual understanding, emotional support, and personal connection that human teachers provide. This perspective highlights the need for a balanced approach that integrates AI tools while preserving the essential human elements of teaching.

Instructor 23 expressed cautious optimism about AI-facilitated language exchange:

"I'm cautiously optimistic about using AI to facilitate language exchange and connect my students with native speakers around the world. While this could provide authentic practice opportunities, I'll need to establish clear guidelines and monitor interactions closely" (I.23).

This statement reflects a nuanced approach to AI integration, recognizing its potential benefits while also acknowledging the need for careful oversight. It highlights the importance of establishing clear guidelines and continuously monitoring AI-facilitated interactions to ensure they remain safe, effective, and aligned with educational objectives.

Instructor 44 emphasized the importance of ongoing professional development:

"Continuous professional development is key. We need regular training sessions on the latest AI tools and how to integrate them effectively into our teaching" (I.44).

This quote underscores the rapid evolution of AI technology and the consequent need for regular training. It suggests that effective AI integration requires educators to constantly update their knowledge and skills, highlighting the dynamic nature of teaching in the AI era.

Instructor 90 shared strategies for addressing the initial learning curve:

"To address the initial learning curve for both me and the students, I organized introductory sessions where we explored the tools together, step by step. I also attended several workshops to get a deeper understanding" (I.90).

This approach demonstrates a proactive strategy for overcoming the challenges of adopting new AI tools. It emphasizes the importance of collaborative learning and professional development in ensuring smooth integration of AI technologies in the classroom.

Instructor 55 reflected on the challenge of balancing AI with traditional methods:

"Balancing AI tool usage with traditional teaching methods was tricky. I blended both approaches to create a balanced learning environment" (I.55).

This statement highlights the ongoing challenge of finding the right balance between AI-enhanced and traditional teaching methods. It suggests that effective integration of AI requires a thoughtful, blended approach that leverages the strengths of both AI and traditional pedagogies.

In conclusion, the effective integration of AI tools in ELT requires continuous evaluation and adaptation. Educators emphasize the need for ongoing professional development, careful oversight of AI-facilitated interactions, and regular updates to AI tools. While recognizing the benefits of AI, they also stress the importance of maintaining a balance with traditional teaching methods and preserving the irreplaceable role of human teachers in providing context, support, and connection.

4.3 Main research question 2

Qualitative analysis conducted on the second research question yielded 530 codes regarding the strategies employed by ELT instructors in adapting AI tools for different proficiency levels. These codes were subsequently organized into 4 main themes and 16 subthemes. The main themes identified are as follows: adaptation strategies for AI tools (110 codes), specific AI tools and their application (140 codes), proficiency level adaptations (180 codes), and instructors' perceptions and experiences with AI tools (100 codes). The following sections will provide a detailed presentation of each main theme and subtheme, supported by relevant excerpts from the collected data.

4.3.1.1 Main theme 1: Adaptation strategies for AI tools (110 codes)

Adapting AI tools for effective use in ELT is a multifaceted endeavor that involves tailoring technology to meet diverse student needs and proficiency levels. This main theme, comprising 110 codes, focuses on the strategies ELT instructors employ to integrate AI tools into their teaching practices. The aim is to leverage these tools to enhance language learning, making it more interactive, personalized, and effective.

Table 5. Adaptation strategies for AI tools in ELT

Theme	Sub-theme	Number of Codes	Key Points
Adaptation strategies for AI tools	Basic AI Use	30	Utilizing AI for foundational language skills, Focusing on basic vocabulary and grammar exercises
	Advanced AI Use	30	Employing sophisticated AI tools for higher proficiency levels, Incorporating advanced writing prompts and complex language tasks

	Interactive and Immersive AI Tools	30	Integrating tools like ChatGPT, Duolingo, and Grammarly, Creating dynamic learning environments with real-time feedback
	Real-Time and Adaptive Feedback	20	Providing immediate feedback on spoken language and writing, Facilitating continuous learning through adaptive corrections
Total Identified Codes		**110**	

In the following sections, each subtheme will be discussed in details and presents specific excerpts from questionnaire, interviews, and essays that highlight how ELT instructors adapt AI tools to different teaching contexts and proficiency levels. This analysis aims to provide a comprehensive understanding of the practical strategies employed to integrate AI into language teaching effectively.

Subtheme 1: Basic use of AI (30 codes)

The basic use of AI in ELT focuses on foundational tasks beneficial for entry-level students, enhancing vocabulary acquisition, basic grammar practice, and pronunciation through gamification and immediate feedback.

Instructor 33 highlighted AI's use for fundamental skills:

"I generally use AI for word games and simple exercises to engage my students. It is very useful for providing immediate feedback on basic vocabulary and sentence structures" (I.33).

This quote demonstrates how AI tools can reinforce basic language skills in an engaging manner.

Instructor 28 emphasized AI's utility for beginners:

"For my entry-level students, I use AI tools that focus on basic grammar and pronunciation practice. The instant feedback helps them correct mistakes immediately" (I.28).

This highlights the immediate feedback feature of AI tools, particularly beneficial for beginners.

Instructor 29 shared their cautious approach:

"To be honest, I haven't done much adapting. Since I'm quite hesitant about AI, I've mostly stuck to using it in very basic ways. For example, I recommended a language learning app to my lower-level students for vocabulary practice" (I.29).

This reflects a conservative yet effective use of AI, focusing on straightforward applications.

Instructor 36 noted success with gamification:

"For lower-level students, I use AI tools that focus on basic grammar and vocabulary. There's a particular app that gamifies language learning, which they love" (I.36).

This underscores the potential of gamification in AI tools to enhance student engagement.

Instructor 84 highlighted AI's effectiveness for beginners:

"When working with beginners, such as those at the A1 level, I've found that AI tools that focus on gamification and repetition are particularly useful" (I.84).

This indicates that AI tools designed for gamified, repetitive practice can be highly effective for foundational language learning.

In conclusion, the basic use of AI in ELT primarily focuses on entry-level students, leveraging gamification and immediate feedback to enhance fundamental language skills.

Educators find these tools particularly useful for vocabulary acquisition, basic grammar practice, and pronunciation.

Subtheme 2: Advanced use of AI (30 codes):

Advanced use of AI in ELT involves sophisticated tools for higher-level students, assisting in complex language tasks and providing detailed feedback on advanced language use.

Instructor 11 highlighted AI's role in creative writing:

"I've been using ChatGPT to help students develop their creative writing skills. It's been a great way to generate engaging and diverse prompts that encourage students to think creatively" (I.11).

This demonstrates AI's utility in fostering creativity and enhancing writing skills.

Instructor 29 noted AI's adaptability in creating personalized lesson plans:

"Lately, I've been experimenting with Claude to create personalized lesson plans based on each student's proficiency level. It's pretty amazing how it can adapt the content to their specific needs!" (I.29).

This underscores AI's capability to tailor educational content to individual needs.

Instructor 15 shared their use of AI for advanced language tasks:

For higher-level students, I utilized AI tools that offered more complex language tasks, like essay writing assistance and advanced reading comprehension exercises. One particular tool I used analyzed their essays and provided detailed feedback on grammar, style, and content it was Poe AI, I think (I.15).

This highlights AI's comprehensive feedback capabilities for advanced learners.

Instructor 91 emphasized AI's role in advanced writing:

"For advanced students, I've used AI tools for advanced writing and speaking practice. One tool, in particular, provides detailed analysis of their essays, pointing out nuances in style and argumentation" (I.91).

This illustrates AI's ability to enhance students' writing by focusing on advanced linguistic elements.

Instructor 9 noted the effectiveness of specific AI tools for advanced learners:

"For B2 students, I employ more sophisticated AI tools such as Grammarly and Write & Improve, which offer advanced writing and editing capabilities. These tools provide real-time feedback on complex sentence structures, advanced vocabulary usage, and stylistic nuances" (I.9).

This underscores the detailed and immediate feedback provided by advanced AI tools.

In conclusion, advanced use of AI in ELT focuses on complex language tasks, personalized learning experiences, and detailed feedback for higher-level students, enhancing their ability to develop nuanced language skills.

Subtheme 3: Interactive and immersive AI Tools (30 codes):

Interactive and immersive AI tools are transforming language learning by providing immediate feedback and engaging experiences across various proficiency levels and language skills.

Instructor 7 highlighted the use of multiple AI tools:

> I've incorporated several AI tools into my teaching, notably chatbots like Kansei bots for conversational practice and automated writing evaluation tools such as Grammarly & ChatGPT GPT’s. These tools have been instrumental in providing students with immediate feedback on their language use (I.7).

This demonstrates how AI tools create dynamic learning environments with instant feedback.

Instructor 10 mentioned using AI for different language skills:

"I've used tools like Gliglish for practicing conversational English and ChatGPT for supplementary activities in reading and writing" (I.10).

This shows the versatility of AI tools in addressing various aspects of language learning.

Instructor 57 noted the effectiveness of AI for beginners:

> For lower-level students, I used AI tools that focused on basic vocabulary and sentence structures, with lots of visual aids and simple, repetitive exercises. For example, there's this app that uses gamification to teach basic English, and it worked wonders for my beginners (I.57).

This underscores the importance of interactive tools for supporting beginner learners.

Instructor 4 highlighted AI's benefits for advanced students:

"For advanced students, I use AI tools that analyze their writing in-depth and provide feedback on more complex language use and style" (I.4).

This illustrates AI's capability to cater to advanced learners' needs.

Instructor 12 emphasized AI's role in developing speaking skills:

> To further develop speaking skills, I encouraged my B2 students to use EnglishCentral. They watched videos on various topics (...) and practiced speaking by mimicking the speakers. The AI's feedback on their pronunciation and fluency helped them make immediate corrections (I.12).

This demonstrates how AI tools can facilitate speaking practice with instant feedback.

In conclusion, interactive and immersive AI tools are enhancing language learning across proficiency levels by providing immediate feedback, engaging experiences, and support for various language skills.

Subtheme 4: Real-time and adaptive feedback (20 codes):

Real-time and adaptive feedback is a critical component of effective language learning, offering students immediate insights into their performance and areas for improvement. This subtheme explores the use of AI for providing instant, detailed feedback on various language tasks.

Instructor 21 highlighted the use of gamified learning tools and plans for AI integration:

"I've been suggesting Duolingo, it sounds like a safe option for students also for extra practice outside of class, and my students seem to enjoy the gamified learning approach. I'm considering trying out ChatGPT for generating writing prompts" (I.21).

This indicates the positive reception of gamified learning and the potential for expanding AI use to writing practice.

Instructor 47 emphasized the customization of listening exercises:

"I use AI tools to provide level-appropriate listening exercises, with slower speech and simpler vocabulary for A1 students and faster, more complex audio for B2 students" (I.47).

This demonstrates AI's adaptability in catering to different proficiency levels, providing tailored content for optimal learning.

Instructor 5 discussed the use of interactive tools for vocabulary acquisition:

> Additionally, I use interactive vocabulary games and exercises that make learning new words engaging and enjoyable, I used Magic School AI to create these. These tools often come with visual aids and pronunciation guides, which are particularly beneficial for early learners who need to build a strong linguistic foundation (I.5).

This highlights the importance of interactive elements in enhancing vocabulary acquisition for beginners, showcasing AI's ability to create engaging learning experiences.

Instructor 60 elaborated on AI's capability to provide nuanced feedback:

> The AI provides detailed feedback on their use of idiomatic expressions, advanced grammar structures, and overall language proficiency. This tailored feedback is invaluable as it highlights subtle errors and areas for improvement, enabling students to refine their language skills further (I.60).

This reflects the advanced capabilities of AI in providing sophisticated feedback for higher-level students, helping them polish their language skills.

Instructor 8 emphasized the transformative impact of AI feedback tools on writing:

> There are many instant writing feedback providing platforms that uses machine learning to provide instant feedback on writing tasks, evaluating grammar, vocabulary, and coherence. For my C1 students, these tools were a game-changer, as they provided them with detailed, personalized feedback that they could use to polish their writing and take their skills to the next level. (I.8).

This underscores AI's role in enhancing writing proficiency through immediate, personalized feedback, particularly beneficial for advanced learners.

In conclusion, real-time and adaptive feedback provided by AI tools is enhancing language learning across proficiency levels. From gamified practice to sophisticated writing feedback, these tools offer immediate, tailored insights that help students refine their language skills efficiently.

4.3.1.2 Main theme 2: Specific AI tools and their application (140 codes)

The application of specific AI tools in ELT showcases the diverse ways technology can enhance language learning. This main theme, comprising 140 codes, focuses on the various AI tools that ELT instructors employ to address different aspects of language proficiency. These tools range from grammar and writing aids to vocabulary and speaking enhancements, each designed to support and improve student learning outcomes.

Table 6. Specific AI tools and their application in ELT

Theme	Sub-theme	Number of Codes	Key Points
Specific AI tools and their application	Grammar and Writing Tools	45	Grammarly: Detailed writing feedback, ChatGPT: Writing refinement and language command
	Vocabulary and Speaking Tools	45	Gibbly: Interactive vocabulary practice, Elsa: Speaking proficiency enhancement
	AI-Enhanced Practice and Assessment Tools	30	Menti: Interactive quizzes Quizlet: Reinforcement exercises and progress assessment
	Personalized and Adaptive AI Tools	20	Diffit: Tailored content delivery, Claude: Customized instruction and feedback
Total Identified Codes		**140**	

In the following sections, each subtheme will be discussed in detail and presents specific excerpts from questionnaire, interviews, and essays that illustrate how ELT instructors utilize these AI tools in their teaching practices. This analysis aims to provide a comprehensive understanding of the practical applications of AI in language teaching.

Subtheme 1: Grammar and writing tools (45 codes):

Grammar and writing tools are essential in aiding students to refine their writing skills. AI tools like Grammarly, ChatGPT, NoRedInk, and Write & Improve offer features such as real-time feedback, writing prompts, and detailed analyses of grammatical and stylistic elements.

Instructor 65 emphasized the benefits of Grammarly:

“I've been suggesting Grammarly to help students improve their writing. The tool provides real-time feedback on grammar, punctuation, and style, which I think has been incredibly beneficial for them” (I.65).

This highlights the immediate corrective feedback that helps students continuously refine their writing skills.

Instructor 6 pointed out the utility of ChatGPT:

"ChatGPT has been useful for generating example sentences and writing prompts. It helps students understand different grammatical structures through practice” (I.6).

This indicates ChatGPT's practical application in providing contextual practice in grammar and writing.

The effectiveness of NoRedInk was also highlighted:

"NoRedInk has been effective for grammar and writing exercises, especially for reinforcing grammar rules through interactive practice." (I.26)

This suggests that NoRedInk is particularly beneficial for reinforcing grammar rules interactively.

Instructor 1 shared their experience with advanced tools:

> For higher-level students, I utilized AI tools that offered more complex language tasks, like essay writing assistance and advanced reading comprehension exercises. One particular tool I used analyzed their essays and provided detailed feedback on grammar, style, and content was Claude (I.1).

This demonstrates the advanced feedback capabilities provided by certain AI tools, which are essential for higher-level learners.

Instructor 4 noted the benefits of Write & Improve for advanced learners:

> Advanced learners, such as those at the C1 level, often require tools that can help them refine their language skills and develop a more nuanced understanding of the language. One AI tool that I've found particularly effective for this group is Write & Improve, a writing platform developed by Cambridge English (I.4).

This underscores the tool's effectiveness in catering to the needs of advanced students.

Instructor 10 elaborated on Grammarly's capabilities:

"Grammarly's advanced writing assistant capabilities provide detailed feedback on grammar, punctuation, and style, helping students produce more polished and sophisticated writing. I have used Grammarly to help students edit essays, focusing on nuanced grammatical structures and stylistic improvements" (I.10).

This highlights Grammarly's role in producing high-quality writing and its ability to provide nuanced feedback on complex language structures.

In conclusion, AI-powered grammar and writing tools are enhancing students' writing skills across different proficiency levels. These tools offer real-time feedback, interactive practice, and detailed analyses, supporting students in refining their grammatical accuracy and writing style.

Subtheme 2: Vocabulary and speaking tools (45 codes):

Vocabulary and speaking tools play a crucial role in language learning by enhancing learners' ability to acquire and practice new words and improve their speaking skills. AI tools offer a range of features that make learning engaging and effective through gamification, real-time feedback, and interactive exercises.

Instructor 45 noted the engaging nature of gamified learning tools:

"I've experimented with Languate for vocabulary and grammar practice. The gamified approach keeps students engaged and motivated to learn new words" (I.45).

This highlights the motivational benefits of gamified learning in vocabulary acquisition.

Instructor 91 praised the use of Gibbly for learning idiomatic expressions:

"Gibbly is great for practicing idioms and colloquial expressions. It makes learning fun and helps students remember phrases better" (I.91).

This indicates the effectiveness of interactive tools in helping students grasp and remember idiomatic language.

The value of immediate feedback in speaking practice was highlighted:

"Speak & Improve helps students with their speaking skills by providing instant feedback on pronunciation and fluency" (I.71).

This emphasizes the role of real-time feedback in improving spoken language skills.

An instructor explained the use of AI tools for different proficiency levels:

> For lower-level students, I used AI tools that focused on basic vocabulary and sentence structures, with lots of visual aids and simple, repetitive exercises. For example, by using Gibbly I employ gamification to teach basic English, and it worked wonders for my beginners (I.1).

This shows the effectiveness of using visual aids and gamification for beginners.

Lastly, Instructor 10 emphasized the importance of refining language skills for advanced learners:

"For B2 students, the focus shifts to refining their language skills, enhancing fluency, and developing a deeper understanding of complex grammar and vocabulary. AI tools such as Grammarly and Write & Improve are invaluable for upper-intermediate learners" (I.10).

This underscores the role of AI in providing advanced practice and feedback for higher-level learners.

In conclusion, AI-powered vocabulary and speaking tools are enhancing language learning across different proficiency levels. These tools offer engaging, interactive experiences with real-time feedback, supporting students in improving their vocabulary, pronunciation, and overall speaking skills.

Subtheme 3: AI-enhanced practice and assessment tools (30 codes):

AI-enhanced practice and assessment tools have become integral to ELT, offering a wide range of interactive and personalized learning experiences. This sub-theme explores various AI tools used by instructors to enhance student engagement, provide immediate feedback, and cater to different proficiency levels in language learning.

Instructor 24 highlighted the benefits of interactive quizzes:

"Menti is a fantastic tool for interactive quizzes and keeping students engaged during lessons. The immediate feedback helps them understand their mistakes and learn from them" (I.24).

This quote emphasizes the importance of immediate feedback in the learning process and how AI tools can enhance student engagement.

Instructor 92 emphasized the use of AI for content generation:

"Google's Bard, I think they changed the name, has been helpful for content generation and creating varied reading materials tailored to different proficiency levels" (I.92).

This demonstrates AI's capability to create tailored learning materials, addressing the diverse needs of students at various proficiency levels.

Instructor 1 shared their experience with AI-driven conversation simulators:

"For B2 students, I use AI-driven conversation simulators like Speak and Replika to engage in realistic dialogues, enhancing their fluency and comprehension. The results have been promising, with students demonstrating greater confidence in both writing and speaking English" (I.11).

This quote illustrates how AI tools can provide realistic language practice, leading to improved confidence and skills in both writing and speaking.

The benefits of AI tools for pronunciation and fluency were noted by Instructor 12:

"The AI tools I use offer immediate feedback on pronunciation and fluency, which is particularly beneficial for beginners. For example, I use EnglishCentral, which provides videos on various topics and allows students to practice speaking by mimicking the speakers" (I.12).

This highlights the effectiveness of AI in providing targeted feedback on specific language skills, particularly for beginner learners.

Instructor 9 highlighted the effectiveness of AI-driven platforms for structured learning:

> AI-driven platforms like Babbel have been instrumental in providing students with structured lessons and immediate feedback on their progress, I especially suggest my students to use these apps so that they can practice outside of class. This has been particularly effective for beginner learners (I.9).

This quote underscores the value of AI-driven platforms in providing structured learning experiences, especially beneficial for beginners.

Lastly, Instructor 10 emphasized the benefits of AI tools for writing tasks:

"Grammarly and Write & Improve provide real-time feedback on writing tasks, evaluating grammar, vocabulary, and coherence. This instant feedback is invaluable for students to refine their writing skills" (I.10).

This demonstrates the capability of AI tools to provide comprehensive feedback on writing tasks, helping students improve their writing skills.

In conclusion, AI-enhanced practice and assessment tools are significantly impacting ELT by providing interactive, personalized learning experiences. These tools offer immediate feedback, tailored content, and opportunities for realistic language practice across various proficiency levels and language skills.

Subtheme 4: Personalized and adaptive AI tools (20 codes):

Personalized and adaptive AI tools are increasingly being used in ELT to tailor learning experiences to the unique needs of individual students. These tools adjust content and difficulty levels based on student proficiency, performance, and feedback, providing differentiated instruction that enhances the learning process.

Instructor 29 emphasized the adaptability of Claude for personalized lesson plans:

"Claude is great for creating personalized lesson plans based on each student's proficiency level. It's amazing how it can adapt the content to their specific needs" (I.29).

This highlights the capability of AI to create tailored lesson plans, addressing individual student needs.

Instructor 85 noted the customization capabilities of AI tools:

"Customizing AI settings allows me to provide differentiated learning experiences that cater to the individual needs of my students" (I.85).

This demonstrates how instructors can leverage AI tools to create personalized learning

Instructor 6 highlighted the engagement from nuanced conversations:

> I turn to AI tools that challenge them with more complex discussions. These tools are designed to engage students in nuanced conversations, allowing them to explore and debate sophisticated topics. The AI provides detailed feedback on their use of idiomatic expressions, advanced grammar structures, and overall language proficiency (I.6).

This emphasizes how AI tools can facilitate advanced language practice and provide detailed feedback on complex language use.

Instructor 14 elaborated on the use of AI tools for upper-intermediate learners:

"For B2 students, the focus shifts to refining their language skills, enhancing fluency, and developing a deeper understanding of complex grammar and vocabulary. AI tools such as Grammarly and Write & Improve are invaluable for upper-intermediate learners" (I.14).

This quote underscores the value of AI tools in helping students refine their language skills at higher proficiency levels.

Lastly, Instructor 22 mentioned the detailed feedback provided by Grammarly:

"Grammarly's advanced writing assistant capabilities provide detailed feedback on grammar, punctuation, and style, helping students produce more polished and sophisticated writing. I have used Grammarly to help students edit essays, focusing on nuanced grammatical structures and stylistic improvements" (I.22).

This demonstrates how AI tools can provide comprehensive feedback on advanced writing tasks, helping students improve their writing skills.

In conclusion, personalized and adaptive AI tools are significantly enhancing ELT by providing tailored learning experiences. These tools offer customized content, adaptive difficulty levels, and detailed feedback across various proficiency levels, enabling instructors to meet the diverse needs of their students more effectively.

4.3.1.3 Main theme 3: Proficiency level adaptations (180 codes)

Proficiency level adaptations are essential in ELT to cater to the diverse needs of students at different stages of language acquisition. This main theme, supported by 180 codes, explores how AI tools are employed to adapt teaching strategies and materials for various proficiency levels. The goal is to ensure that each student receives instruction that is appropriately challenging and supportive, facilitating optimal learning outcomes.

Table 7. AI Tool adaptations for different proficiency levels in ELT

Theme	Sub-theme	Number of Codes	Key Points
Proficiency level adaptations	Adapting for Beginners	60	Basic vocabulary and sentence structure practice, Foundational pronunciation support
	Adapting for Advanced Levels	60	Complex language tasks and advanced writing practice, Sophisticated AI tools for refining language skills
	Adapting for Intermediate Levels	30	Real-world language applications, Native speaker exposure for listening comprehension
	Adapting for All Proficiency Levels	30	Customizable AI settings for differentiated learning, Tailored lesson plans and assessments
Total Identified Codes		**180**	

This section will provide a detailed analysis of these subthemes, discussing how AI tools are utilized to adapt language teaching to different proficiency levels and enhance the overall learning experience for students.

Subtheme 1: Adapting for beginners (60 codes):

This subtheme explores how AI tools are effectively employed to support beginners, particularly those at the A1 proficiency level, in their language acquisition journey. These tools focus on basic vocabulary, sentence structures, and pronunciation, utilizing gamification and interactive elements to keep learners engaged and motivated.

Instructor 42 highlighted the effectiveness of gamification and repetition for beginners:

> When working with beginners, such as those at the A1 level, I've found that AI tools that focus on gamification and repetition for beginners are particularly useful. For example, I once used the app Memrise AI to help my A1 students build their basic vocabulary (I.42).

This approach is echoed by Instructor 9 who emphasized the utility of Duolingo:

"For my A1 students, I use simple AI tools that provide basic vocabulary and sentence structures. I didn't know Duolingo was AI, but it is especially effective for this purpose, offering repetitive practice and immediate feedback" (I.9).

These quotes demonstrate the importance of repetition and gamification in engaging beginners and building foundational skills.

For beginner learners, interactive elements play a crucial role:

"Using AI tools like Languate and ChatGPT with learners helps in maintaining their interest through interactive games and songs. This approach makes learning fun and engaging for them" (I.76).

This focus on engagement by Instructor 71 is complemented by tools that provide immediate feedback, especially for pronunciation:

"AI tools such as Elsa Speak are beneficial for beginners as they provide instant feedback on pronunciation, helping students develop accurate speaking skills from the start" (I.71).

Visual aids are also crucial for beginners, as noted by Instructor 21:

"For A1 students, I prefer using AI tools that offer visual aids and interactive elements to help them grasp basic concepts more effectively" (I.21).

Instructor 9 highlighted the adaptation of AI-generated content to suit different proficiency levels:

"For A1 students, I simplify my on-hand content by using AI-generated content, while for B2, I use more advanced prompts to challenge them" (I.9).

This adaptability allows for tailored learning experiences at each level.

In conclusion, AI tools for beginners focus on gamification, repetition, visual aids, and interactive elements to engage learners and build foundational language skills. These tools are particularly effective in teaching basic vocabulary, grammar, and pronunciation while maintaining student motivation through fun and engaging activities. The ability to provide immediate feedback and adapt content to different proficiency levels makes these AI tools valuable assets in supporting beginners in their language learning journey.

Subtheme 2: Adapting for advanced levels (60 codes):

This subtheme explores how AI tools are effectively utilized to support advanced learners, particularly those at the B2 proficiency level and higher, in their language development. The focus is on providing sophisticated language tasks and detailed feedback to refine their language skills.

Instructor 54 highlighted the use of specific tools for advanced learners:

> For advanced learners, AI tools that offer detailed feedback on writing and speaking are invaluable. Grammarly and Write & Improve are great for refining their language skills and developing a more nuanced understanding of the

language and of course I try to make my students exchange with the chatbots, some students preferred using Gemini, some used ChatGPT to practice more (I.54).

This emphasis on detailed feedback is echoed in Instructor 20's comment:

"For my B2 students, I use advanced AI tools that provide feedback on complex sentence structures, advanced vocabulary usage, and stylistic nuances" (I.20).

These quotes demonstrate the importance of sophisticated feedback mechanisms in supporting advanced learners.

The use of AI for complex language tasks was noted by Instructor 41:

"For higher-level students, I utilized AI tools that offered more complex language tasks, like essay writing assistance and advanced reading comprehension exercises. One particular tool I used analyzed their essays and provided detailed feedback on grammar, style, and content" (I.41).

This focus on complex tasks is complemented by tools that provide in-depth analysis:

"For advanced students, I use AI tools that analyze their writing in-depth and provide feedback on more complex language use and style" (I.4).

The specific capabilities of Grammarly for advanced writing were emphasized:

"Grammarly's advanced writing assistant capabilities provide detailed feedback on grammar, punctuation, and style, helping students produce more polished and sophisticated writing. I have used Grammarly to help students edit essays, focusing on nuanced grammatical structures and stylistic improvements" (I.10).

Additionally, the use of AI-driven conversation simulators was highlighted:

"AI-driven conversation simulators like Replika allow advanced students to engage in realistic dialogues, enhancing their fluency and comprehension" (I.65).

In conclusion, AI tools for advanced learners focus on providing sophisticated language tasks, detailed feedback, and in-depth analysis of complex language use. Tools like Grammarly and Write & Improve offer advanced writing assistance, while conversation simulators enhance fluency and comprehension. These AI tools play a crucial role in helping advanced learners refine their language skills, develop a nuanced understanding of the language, and produce more polished and sophisticated writing. By offering complex tasks and detailed feedback on grammar, style, and content, these tools support advanced learners in reaching higher levels of language proficiency.

Subtheme 3: Adapting for intermediate levels (30 codes):

This subtheme explores how AI tools are effectively utilized to support intermediate learners, particularly those at the B1 proficiency level, in their language development. The focus is on providing real-world context and practical applications to enhance understanding and retention of new vocabulary and grammar concepts.

Instructor 14 highlighted the effectiveness of using both AI chatbots and Yabla for B1 students:

> For B1 students, AI tools that provide more context and real-world application are effective. I use ChatGPT and Yabla, together. Yabla offers authentic videos with interactive subtitles and exercises, is particularly useful for improving listening comprehension and expanding vocabulary. I use ChatGPT to create activities based on the authentic videos on Yabla (I.14)

The benefits of practical applications were noted by Instructor 64:

"For intermediate learners, using AI tools that offer real-life scenarios and practical applications helps them better understand and retain new vocabulary and grammar concepts" (I.64).

This focus on real-world application is reinforced by Instructor 3's comment:

"For intermediate learners, I use AI tools that provide real-world application and context. These tools help students engage with more challenging content at their own pace" (I.3).

The importance of exposure to native speakers was highlighted by Instructor 58:

"Intermediate students benefit from AI tools that expose them to native speakers and real-life situations, like Kansei for example. This helps them improve their listening skills and vocabulary" (I.58).

In conclusion, AI tools for intermediate learners focus on providing real-world context, authentic materials, and practical applications. These tools, such as combination of Yabla, ChatGPT and EnglishCentral, offer interactive features that allow students to engage with more challenging content at their own pace. The emphasis on exposure to native speakers and real-life situations helps improve listening comprehension, expand vocabulary, and develop speaking skills. By offering a bridge between classroom learning and real-world language use, these AI tools play a crucial role in supporting intermediate learners in their language development journey.

Subtheme 4: Adapting for all proficiency levels (30 codes):

This subtheme explores how AI tools are used to create differentiated learning paths, ensuring that each student receives appropriate challenges and support across all proficiency levels.

Instructor 92 highlighted the customization of AI tool settings:

"I customize AI tool settings to match the proficiency level of students, ensuring relevance and appropriateness" (I.92).

This approach is echoed by Instructor 64 who emphasized tailoring exercises:

"Using AI tools allows me to tailor the difficulty of exercises based on student feedback and performance, making sure each level receives the appropriate challenges" (I.64).

These quotes demonstrate the flexibility of AI tools in adapting to different proficiency levels.

The effectiveness of personalized learning paths was noted by Instructor 34:

"Personalized learning paths created with AI tools help address the unique needs of each student, enhancing their learning experience" (I.34).

This personalization is further illustrated by Instructor 17's experience:

> One specific example that stands out involves using an AI-powered language learning platform to create personalized learning paths for my students. For my advanced students, the AI tool was programmed to offer more sophisticated language tasks, such as writing prompts that required critical thinking and creativity (I.17).

The versatility of AI tools across all levels was emphasized:

"AI tools are useful across all levels as they can be adjusted to fit the learning pace and proficiency of different students" (I.63).

Conversely, for beginners repetitive use of these tools was emphasized by Instructor 8:

"For my A1 students, I use simple AI tools that provide basic vocabulary and sentence structures. Even though sometimes it gets repetitive, Duolingo is especially good for this purpose, offering repetitive practice and instantaneous feedback" (I.8).

In conclusion, AI tools demonstrate remarkable adaptability in catering to all proficiency levels. They offer customizable settings, personalized learning paths, and tailored exercises that match the needs of individual students. From providing basic vocabulary practice for beginners to offering sophisticated writing tasks for advanced learners, these tools ensure that each student receives appropriate challenges and support. This flexibility allows instructors to create differentiated learning experiences that enhance the language learning journey across all proficiency levels.

4.3.1.4 Main theme 4: Instructors' perceptions and experiences with AI Tools (100 codes)

Instructors' perceptions and experiences with AI tools are crucial in understanding the practical implementation and effectiveness of these technologies in ELT. This main theme, supported by 100 codes, delves into how instructors view and interact with AI tools, highlighting their benefits, challenges, and the innovative approaches they adopt.

Table 8. Instructors' perceptions and experiences with AI tools in ELT

Theme	Sub-theme	Number of Codes	Key Points
Instructors' perceptions and experiences with AI Tools	Positive Experiences	30	Enhanced language learning and student engagement, Improved instructional efficiency
	Concerns and Challenges	30	Technical difficulties and lack of training, Limitations in addressing complex language nuances
	Innovative and Experimental Approaches	20	Creative integration of AI tools, Enhanced learning experiences through innovative uses
	Skepticism and Resistance	20	Doubts about AI effectiveness, Concerns about impact on traditional teaching methods
Total Identified Codes		**100**	

This section will provide a detailed analysis of these subthemes, discussing how instructors perceive and experience AI tools in their teaching practices.

Subtheme 1: Positive experiences (30 codes):

This subtheme explores the various ways in which instructors have found AI tools to be beneficial in enhancing student engagement, motivation, language acquisition, and overall learning outcomes in ELT.

Instructor 20 highlighted the increased engagement and motivation among students:

"Using AI tools has greatly increased student engagement and motivation. The interactive nature of these tools keeps students interested and actively participating in lessons" (I.20).

This sentiment is echoed by Instructor 5 who emphasized the interactive nature of AI tools:

"The interactive nature of AI tools has made learning more enjoyable for students, leading to increased participation and better retention of language skills" (I.5).

These quotes demonstrate how AI tools can create a more engaging and motivating learning environment.

The enhancement of language acquisition was noted by Instructor 23:

"AI tools have enhanced language acquisition for my students. The immediate feedback and personalized learning experiences help them retain information better" (I.23).

This idea of immediate feedback is further elaborated by Instructor 9:

"AI tools provide immediate feedback, which helps students learn from their mistakes in real-time and reinforces correct language usage" (I.9).

The ability to tailor lessons to individual needs was emphasized:

"The flexibility and capabilities of AI tools have allowed me to tailor lessons more effectively to individual student needs" (I.81).

This personalization aspect is reiterated in an essay:

"Using AI tools allows me to provide more personalized learning experiences, which has significantly improved student outcomes" (I.50).

The complementary role of AI tools in instruction was highlighted:

"AI tools complement my instruction by providing additional practice and reinforcement of language concepts outside of the classroom" (I.40).

Finally, Instructor 15 summarized the overall positive impact:

"Incorporating AI tools into my teaching has revolutionized my approach. Students are more engaged and motivated, and their language acquisition has improved significantly" (I.15).

In conclusion, the positive experiences with AI tools in ELT are multifaceted. Instructors report increased student engagement and motivation, enhanced language acquisition through immediate feedback and personalized learning experiences, improved retention of language skills, and the ability to tailor lessons more effectively to individual needs. These tools complement traditional instruction by providing additional practice and reinforcement, both inside and outside the classroom. The overall impact has been a revolution in teaching approaches, leading to improved student outcomes and more effective achievement of language learning goals.

Subtheme 2: Concerns and challenges (30 codes):

This subtheme explores the concerns and challenges instructors face when implementing AI tools in ELT, including skepticism about their effectiveness for advanced learners, potential over-reliance on technology, technical difficulties, and the need to balance AI tools with traditional teaching methods.

Instructor 18 expressed skepticism about AI tools for advanced learners:

"I am skeptical about the effectiveness of AI tools for higher-level students. They often fall short in providing the depth of analysis needed for advanced learners" (I.18).

This concern is echoed by Instructor 67:

"Some AI tools are not yet advanced enough to provide the nuanced feedback required for higher proficiency levels" (I.67).

These quotes highlight a significant limitation of current AI tools in addressing the needs of advanced language learners.

The potential for over-reliance on AI tools was a recurring concern:

"There are concerns about students becoming overly reliant on AI tools, leading to laziness and a lack of critical thinking skills" (I.92).

This sentiment is reiterated by Instructor 10:

"There are concerns about students becoming overly reliant on AI tools, which could impact their ability to think critically and solve problems independently" (I.10).

Technical challenges were also noted as a significant barrier:

"Technical challenges and the need for reliable internet access can be significant barriers to effectively using AI tools in the classroom" (I.45).

The importance of balancing AI tools with traditional teaching methods was emphasized:

"While AI tools can be useful, they should not replace human interaction and guidance. It's important to maintain a balance between technology and traditional teaching methods" (I.1).

This need for balance is further elaborated by Instructor 12:

"Of course AI tools offer substantial benefits but it is essential to integrate them thoughtfully into the overall teaching strategy. The role of the instructor in guiding students and providing context for the AI-generated feedback remains crucial" (I.12).

Lastly, the challenge of adapting AI tools for different proficiency levels was highlighted by Instructor 8:

"Adapting AI tools for different proficiency levels is not without its challenges. One of the biggest lessons I've learned is the importance of choosing tools that align with the specific goals and needs of each group" (I.8).

In conclusion, while AI tools offer numerous benefits in ELT, instructors face several challenges in their implementation. These include concerns about the tools' effectiveness for advanced learners, potential over-reliance by students, technical difficulties, and the need to balance AI use with traditional teaching methods. The integration of AI tools requires thoughtful consideration and adaptation to ensure they align with specific learning goals and complement, rather than replace, human instruction. Addressing these challenges is crucial for the successful and beneficial implementation of AI tools in language teaching.

Subtheme 3: Innovative and experimental approaches (20 codes):

This subtheme explores how instructors experiment with AI tools to find the most effective strategies for their students' needs, including customizing AI settings, creating personalized learning paths, incorporating gamification, and using AI for project-based learning and real-life scenario simulations.

Instructor 47 expressed openness to experimenting with AI tools:

"I am open to experimenting with different AI tools to find the most effective ones for my students' needs" (I.47).

This willingness to experiment is echoed by Instructor 79:

"I am willing to try new AI tools and methods to enhance my teaching and provide a more dynamic learning experience for my students" (I.79).

These quotes demonstrate instructors' openness to innovation in their teaching practices.

The benefits of personalized learning paths were emphasized:

"By customizing AI settings and creating personalized learning paths, I can better address the unique needs of each student" (I.59).

This approach is further elaborated by Instructor 12:

"Using AI tools to create personalized learning paths for my students has been incredibly beneficial, allowing me to address their individual needs more effectively" (I.12).

The incorporation of gamification and interactive elements was highlighted by Instructor 5:

"Incorporating AI tools in innovative ways, such as through gamification and interactive elements, has significantly enhanced student engagement and motivation" (I.5).

The use of AI for real-life scenarios was noted:

"Using AI tools to simulate real-life scenarios and role-playing exercises has been very effective in enhancing my students' language skills and confidence" (I.95).

Lastly, the importance of continuous experimentation was emphasized:

"Experimenting with different AI tools and approaches has allowed me to find the most effective strategies for enhancing student engagement and learning outcomes" (I.8).

In conclusion, innovative and experimental approaches to using AI tools in ELT demonstrate instructors' creativity and adaptability. By customizing AI settings, creating personalized learning paths, incorporating gamification, and using AI for real-life simulations, instructors are finding effective ways to enhance student engagement, motivation, and learning outcomes. This willingness to experiment and adapt AI tools to

specific student needs is crucial for maximizing the potential of these technologies in language teaching.

Subtheme 4: Skepticism and resistance (20 codes):

This subtheme explores the reservations and hesitations that instructors have towards using AI tools in their teaching practices. Despite the growing integration of AI tools in ELT, some instructors remain skeptical and resistant to fully embracing these technologies. Concerns include doubts about the effectiveness and reliability of AI tools, fears of student over-reliance on technology, and technical challenges.

Instructor 18 expressed a preference for traditional teaching methods over AI tools:

"I am skeptical about the effectiveness of AI tools and prefer traditional teaching methods" (I.18).

Instructor 76 raised concerns about the reliability of AI tools for higher proficiency levels: "*There are reservations about the reliability of AI tools, especially for higher proficiency levels"* (I.76).

The potential for AI tools to encourage laziness was noted by Instructor 55:

*"I have concerns about the potential for AI tools to encourage laziness among students, as they might rely too heavily on these tools" (*I.55).

Caution about fully integrating AI tools was expressed by Instructor 51:

"While interested in AI tools, I am cautious about fully integrating them into my teaching without seeing more evidence of their effectiveness" (I.51).

Instructor 45 highlighted technical challenges as significant barriers:

"Technical challenges and the need for reliable internet access are significant barriers to effectively using AI tools in the classroom" (I.45).

Instructor 4 discussed the need for more evidence before fully embracing AI tools:

"I'm cautious about fully embracing AI tools without more evidence of their benefits, especially for higher-level students" (I.4).

Reservations about the accuracy and appropriateness of AI-generated content were mentioned by Instructor 50:

"There are reservations about the accuracy and appropriateness of AI-generated content for different proficiency levels" (I.50).

Instructors elaborated on the challenges of integrating AI tools. Instructor 83 highlighted:

"Adapting AI tools for different proficiency levels is not without its challenges. One of the biggest lessons I've learned is the importance of choosing tools that align with the specific goals and needs of each group" (I.83).

The need for thoughtful integration of AI tools was emphasized by Instructor 52:

"While AI tools offer substantial benefits, it is essential to integrate them thoughtfully into the overall teaching strategy. The role of the instructor in guiding students and providing context for the AI-generated feedback remains crucial" (I.52).

Concerns about over-reliance on AI tools were reiterated by Instructor 16:

"There are concerns about students becoming overly reliant on AI tools, which could impact their ability to think critically and solve problems independently" (I.16).

In conclusion, skepticism and resistance towards AI tools in ELT highlight important challenges and concerns among instructors. These include doubts about effectiveness and reliability, fears of over-reliance by students, and technical barriers. Addressing these concerns through thoughtful integration and providing more evidence of AI tools' benefits are crucial steps for fostering acceptance and effective use in teaching practices.

4.4 Discussion

This subchapter presents the discussion of the findings for each respective research question.

4.4.1 Discussion on the first research question

The first research question in this study looks at ELT instructors' attitudes to using AI tools in their teaching practice, focusing specifically on the expected benefits and foreseen challenges within this regard. Analysis of the qualitative data, based on questionnaire, semi-structured interviews, and open-ended essays, identified four emerging themes: AI tools' perceived benefits, challenges encountered with AI tools, potential AI tools in ELT, and balancing AI and traditional teaching methods.

Throughout the study, instructors highlighted the benefits of AI tools and how they implemented them into their teaching practice. They reported using AI for creating personalized lessons, generating exercises, providing immediate feedback, and facilitating language practice through chatbots. Instructors emphasized adapting these tools to different proficiency levels, from basic vocabulary practice for beginners to complex writing tasks for advanced learners. Development of learning experience, personalization in learning, enhancement of teaching efficiency, and more easy control over student motivation and engagement are marked as the most frequently mentioned advantages. These findings were in support of the results obtained by Huang et al. (2021), indicating that virtual tutors and chatbots provide the English language learner with individualized assistance, immediate feedback, and interactive practice—three elements highly important in transforming ELT. AI-powered platforms and targeted exercises enable students to learn at their own pace, catering to individual learning needs and styles. This personalization was viewed as a vast improvement over the classroom setting, where attending to the diverse needs of all the students is a challenging issue. Instructors said that because AI tools could give immediate, unbiased, and consistent feedback, students were better able to recognize and learn from their mistakes and therefore progress faster with confidence. These results confirm the findings of Tulasi and Rao (2023), who reported that AI contributes to academic progress by providing personalized learning paths, immediate feedback, and increased engagement.

The immersive nature of AI-enhanced lessons was also highlighted as a key factor in enhancing the learning experience. By making learning more engaging and relevant to real-world situations, AI tools help bridge the gap between classroom instruction and practical language application. This contextualized approach was seen as particularly beneficial for increasing student motivation and participation. Similarly, Na-young Cha and Kim (2019) found that chatbots facilitate language practice and interaction, which aligns with the findings of this study.

Moreover, the automation of administrative tasks, such as grading, was appreciated by instructors as a means of improving teaching efficiency. By saving time on routine tasks, teachers can then focus on the more impactful areas of their job, such as lesson planning and supporting students individually. These results support the findings of Sajja et al. (2023), who reported that intelligent assistants provide adaptive learning experiences and streamline administrative tasks, resonating with the instructors' perspectives in this study.

Despite the numerous benefits, challenges were also encountered, instructors identified several challenges associated with the integration of AI tools in ELT. Technical issues, ethical and privacy concerns, over-reliance and misuse, and the need for maintaining the human element in teaching were among the most pressing concerns. These findings are consistent with the challenges discussed by Homayouni et al. (2024), who addressed the ethical and privacy issues related to AI in education. Ethical and privacy concerns emerged as another significant challenge. The collection and storage of student data raised questions about data protection and compliance with regulations. Instructors emphasized the need for clear data protection measures and transparent communication with students about how their data is used. The potential influence of AI algorithms on teaching practices and decisions was also a concern, highlighting the importance of using AI responsibly and ethically

Instructors reported that technical problems, such as software glitches and connectivity issues, could disrupt the flow of lessons and frustrate both students and teachers. The initial learning curve associated with new technologies was also seen as a potential barrier, leading to resistance from some students who may feel intimidated or uncertain about the effectiveness of AI tools. The lack of personal touch and flexibility in AI tools

was another issue raised by instructors. While AI can provide personalized support, it may struggle to adapt to unexpected situations or provide the empathy and understanding that human teachers offer. This limitation underscores the importance of balancing AI use with human interaction and using AI tools as a supplement rather than a replacement for traditional teaching methods. These findings align with the discussions in the literature about the limitations of AI tools in providing emotional support and fostering creativity.

Over-reliance on and misuse of AI tools were also identified as potential problems. Some instructors observed that students might become overly dependent on AI technologies, neglecting the development of their own cognitive and linguistic abilities. The misuse of AI tools for tasks that students should be performing themselves was seen as a risk that could undermine the learning process and limit the acquisition of essential skills. Clear guidelines for appropriate use and the selection of tools that genuinely enhance learning were suggested as ways to mitigate these risks.

Despite the challenges, instructors expressed optimism about the transformative potential of AI tools in ELT. The ability of AI technologies to make language teaching more interactive, personalized, and effective was widely acknowledged. Innovative educational approaches, such as immediate feedback provided by pronunciation and speech recognition tools, realistic practice environments created by chatbots and virtual assistants, and personalized learning experiences offered by adaptive language learning platforms, were seen as powerful ways to enhance language learning. These findings are consistent with the literature, which highlights the revolutionary potential of AI in making language teaching more interactive, personalized, and effective (Jiang, 2022). The collaborative and creative potential of AI tools was also emphasized. By encouraging students to work together on projects, think critically, and express their creativity, AI technologies can foster the development of essential life skills alongside language skills. These results support the findings of Simamora and Tenrisanna (2023), who reported that the integration of virtual reality and augmented reality in AI-enhanced ELT creates engaging and effective learning environments.

Additionally, AI tools were seen as having the potential to facilitate global collaboration by connecting students with native speakers and providing opportunities for authentic

language practice. AI-powered language exchange platforms were perceived as valuable tools for fostering a sense of global community and exposing students to diverse cultural perspectives. Balancing AI and traditional teaching methods while recognizing the potential of AI tools was another highlighted issue, instructors consistently stressed the importance of balancing AI integration with traditional teaching methods. The need for a thoughtful approach that leverages the strengths of AI while preserving the essential human elements of teaching, such as empathy, creativity, and adaptability, was a recurring theme in the qualitative data. These findings align with the literature's call for a balanced approach that leverages AI's strengths while preserving the essential human elements of teaching.

Instructors emphasized the importance of integrating AI tools with pedagogical strategies to create a holistic and effective learning experience. The use of AI as a supplementary tool, rather than a replacement for human teachers, was seen as crucial. Practical strategies for integration, such as using AI for immediate feedback and support while maintaining human-led instruction, were highlighted as effective approaches. Concerns about equity and accessibility in AI-assisted ELT were also raised. The potential for widening the digital divide and disadvantaging students with limited access to technology was a significant issue. Instructors stressed the need for advocating for equitable access, providing alternative learning options, and collaborating with IT departments to ensure inclusive AI integration. Financial barriers and the need for affordable AI tools were also identified as important factors in promoting equity. Maintaining human touch and creativity in the classroom emerged as a central theme in the instructors' perspectives. The potential loss of cultural authenticity and human creativity with AI-generated materials was a concern, highlighting the need for careful review and curation of AI content to ensure alignment with cultural and creative standards. Balancing AI use with interactive, group-based activities that foster social and emotional interactions among students was seen as essential for preserving the human element in language teaching. These findings resonate with the literature's emphasis on the irreplaceable value of human interaction in teaching.

In conclusion, the perspectives of ELT instructors on using AI tools in their teaching practice, as explored in this study, reveal a complex interplay of benefits, challenges,

potential, and the need for balance. While the perceived benefits, such as enhanced learning experiences, personalized learning, improved teaching efficiency, and increased student motivation, demonstrate the transformative potential of AI in language education, the challenges encountered, including technical issues, ethical concerns, over-reliance, and the need for human interaction, underscore the importance of a cautious and balanced approach to AI integration. The successful integration of AI tools in ELT requires a thoughtful approach that leverages the strengths of AI while preserving the essential human elements of teaching. By addressing the challenges and harnessing the potential of AI technologies, educators can create a more engaging, personalized, and effective language learning experience for their students. The findings of this study contribute to the growing body of literature on AI in ELT by providing contextualized insights from the instructors' perspectives and highlighting the importance of considering the localized cultural and institutional factors that shape the use of AI tools in language teaching.

4.4.2 Discussion on the second research question

The second research question in this study aimed to explore how ELT instructors employ AI tools to cover specific skills and proficiency levels in their classes, with a particular focus on the strategies they use to adapt AI tools for different proficiency levels, such as A1 or B2. The qualitative data analysis, based on questionnaire, semi-structured interviews, and open-ended essays, revealed four main themes: adaptation strategies for AI tools, specific AI tools and their application, proficiency level adaptations, and instructors' perceptions and experiences with AI tools.

The instructors in this study demonstrated various adaptation strategies for AI tools, ranging from basic to advanced use, and incorporating interactive and immersive elements to enhance the learning experience. The basic use of AI tools, such as gamified platforms like Gibbly, Duolingo and Memrise, was particularly beneficial for entry-level students, helping them build foundational skills in vocabulary, grammar, and pronunciation. The instructors' cautious yet effective approach to integrating these tools suggests a balanced strategy that focuses on simple applications without overwhelming students or instructors. These findings align with the early approaches to AI research, which aimed at building theories and models that considered various theoretical

paradigms and practical applications, including production systems and logical planners (Russell & Norvig, 2021). Advanced use of AI tools, such as ChatGPT, Grammarly, and Write & Improve, was employed to cater to the complex needs of higher-level students. These tools provided personalized lesson plans, fostered creative writing, and offered detailed feedback on advanced language tasks. The ability of AI to create immersive learning experiences and provide real-time evaluation was particularly beneficial for advanced learners, helping them refine their language skills by offering insights into grammar, style, and content. The emphasis on advanced AI tools for higher-level students aligns with the deep learning approach, which uses neural networks to mimic learning mechanisms similar to the human brain, enabling machines to perform complex tasks accurately through hierarchical learning and data processing (LeCun et al., 2015).

The application of specific AI tools in ELT showcased the diverse ways technology can enhance language learning. Grammar and writing tools, such as Grammara, Grammarly, and ChatGPT and Claude were frequently cited for their real-time corrective feedback and versatility in generating writing prompts and example sentences. These tools were beneficial across different proficiency levels, providing both foundational support and advanced stylistic guidance. The use of Grammarly and ChatGPT in the current study parallels the benefits of Automated Writing Evaluation (AWE) tools, which have been shown to enhance writing skills by providing fast feedback and personalized guidance (Sarıcaoğlu & Bilki, 2021). Vocabulary and speaking tools, like Duolingo and Kansei, offered interactive and engaging ways to learn new words and phrases and provided exposure to real-world language use and conversational practice. The practical application of these tools was crucial for preparing students for real-life interactions, enhancing their readiness for authentic communication situations. The benefits of speech recognition technology in providing personalized and accurate feedback, as emphasized by Tejedor-García et al. (2020) and Wang (2022), align with the findings on vocabulary and speaking tools in the current study.

Proficiency level adaptations were essential in ELT to cater to the diverse needs of students at different stages of language acquisition. Adapting AI tools for beginners focused on gamification, repetition, interactive elements, and immediate feedback, which were highly beneficial for developing basic language skills. Tools like Memrise and

Languate offered engaging and enjoyable learning experiences that helped students build a strong foundation in language learning. The adaptation of AI tools for beginners, focusing on interactive and repetitive learning experiences, aligns with the constructivist approach in AI, inspired by Piaget's work, which emphasizes the development of understanding through sensorimotor interaction (Johnston, 2023).

Adapting AI tools for advanced learners was crucial to provide sophisticated language practice and detailed feedback necessary for refining their skills. Tools like Grammarly and Write & Improve offered real-time feedback on complex sentence structures, advanced vocabulary usage, and stylistic nuances, helping students develop a deeper understanding of the language and produce more polished writing. The use of advanced AI tools for higher-level language learners is supported by the role of deep learning in achieving high accuracy in complex tasks, as highlighted by LeCun et al. (2015).

Adapting AI tools for all proficiency levels involved customizing settings and tailoring exercises to match the individual needs of students. The flexibility of AI tools to adjust to different proficiency levels allowed educators to create personalized learning paths that catered to the unique needs of each student. This personalized approach was crucial for maintaining student engagement and motivation across all levels. The importance of tailoring educational content to individual learning needs, as discussed by Essa et al. (2023), aligns with the findings on proficiency level adaptations in the current study. Instructors' perceptions and experiences with AI tools were crucial in understanding the practical implementation and effectiveness of these technologies in ELT. Positive experiences highlighted the significant impact of AI tools on enhancing student engagement, motivation, and language acquisition. The interactive nature of these tools kept students actively participating in lessons, while the immediate feedback provided by AI helped students learn from their mistakes in real-time and reinforce correct language usage. The positive experiences of instructors in the current study reflect the importance of ethical considerations and user autonomy in the deployment of AI technologies, as highlighted by Huang (2023).

However, instructors also identified concerns and challenges associated with AI tools. Some instructors felt that AI tools often lacked the depth of analysis needed to engage

advanced learners with complex texts and nuanced language tasks. There were also concerns about students becoming overly reliant on AI tools, which could lead to laziness and diminished critical thinking skills. Technical challenges, such as the need for reliable internet access, presented significant barriers to the effective use of AI tools in the classroom. These concerns align with the broader ethical issues in AI education, such as data privacy, algorithmic fairness, and the potential for over-reliance on AI tools, as discussed by Jobin et al. (2019).

In conclusion, the perspectives of ELT instructors on employing AI tools to cover specific skills and proficiency levels, as explored in this study, reveal a multifaceted approach to integrating technology in language teaching. The adaptation strategies, specific AI tools and their applications, proficiency level adaptations, and instructors' perceptions and experiences collectively contribute to a comprehensive understanding of how AI tools can be effectively leveraged to enhance language learning across various proficiency levels. The findings of this study align with and contribute to the existing literature on AI in education, highlighting the importance of balancing the benefits and challenges of AI tools to create a more engaging, personalized, and effective language learning experience for students, tailored to their specific needs and proficiency levels.

5. CONCLUSION AND SUGGESTIONS

This study investigated the perceptions of ELT teachers at a foundation university in Istanbul regarding the use of AI tools in their teaching approach. The research also focused on the advantages, challenges, and methods for customizing these resources for various proficiency levels and specific language skills. By examining these aspects in a localized and culturally specific context, this study addresses a significant gap in the literature regarding practical applications and perceptions of AI in ELT.

The findings reveal several key benefits of AI integration in ELT. Primarily, AI tools enhance the learning experience through personalized learning pathways, which adapt to individual student needs and progress. This personalization leads to improved teaching efficiency, as instructors can focus on areas where students need the most support. Additionally, the study found that AI tools significantly increase student motivation and engagement, particularly through immersive lesson environments featuring adaptive quizzes and gamified lessons. These elements make language learning more interactive and enjoyable for students, potentially leading to better learning outcomes.

However, the research also highlighted significant challenges that instructors face when integrating AI technologies. Technical issues, such as connectivity problems and software bugs, often impede the smooth implementation of AI tools. More critically, ethical and privacy concerns emerged as major considerations, particularly regarding user data protection and potential biases in AI algorithms. A fundamental challenge identified is the risk of over-reliance on AI, which could potentially stifle students' independent thinking processes. The study emphasizes the importance of maintaining a balance between AI integration and preserving the essential human elements of teaching, such as empathy, creativity, and cultural understanding, which AI cannot fully replicate.

The research provided valuable insights into how instructors adapt AI tools for different proficiency levels and skill development. At basic levels, AI tools are primarily used for fundamental vocabulary and grammar exercises, often incorporating gamification to maintain student engagement. For advanced learners, instructors employ AI for more

complex language tasks and to provide sophisticated feedback on nuanced aspects of language use. The study identified specific tools like ChatGPT, Claude, and Grammarly as being particularly effective in creating interactive and immersive digital learning environments across various proficiency levels.

An unexpected finding was the varying degrees of acceptance and comfort among instructors regarding AI integration. While some instructors readily embraced AI tools, others expressed wariness or resistance. This variance underscores the critical need for targeted professional development and robust institutional support to ensure effective and widespread implementation of AI tools in ELT.

This study highlights both the transformative potential and the challenges of AI in ELT, emphasizing the need for a balanced approach that enhances rather than replaces traditional teaching methods. The research contributes valuable insights into AI's practical application in a specific cultural context, offering guidance for educators, institutions, and developers. The findings have significant implications for ELT pedagogy and policy, stressing the importance of ongoing assessment, preserving human elements in teaching, addressing ethical concerns, and ensuring equitable access to AI tools. This nuanced understanding of AI integration from the instructor's perspective provides a foundation for future pedagogical practices, policy development, and research in this rapidly evolving field, ultimately shaping the responsible integration of AI in language education.

Implications for ELT

The findings of this study offer several important implications for the field of English Language Teaching. By examining the practical application of AI tools in a specific educational context, this research provides valuable insights that can inform future practice, policy, and research in ELT.

Key Contributions:

1. Understanding of ELT instructors' perceptions and integration of AI tools

2. Identification of benefits, challenges, and adaptation strategies for AI in ELT

3. Insights into creating dynamic, personalized learning environments
4. Clarification of obstacles in AI integration, including technical, ethical, and human interaction concerns

Educational Implications:

1. Enhanced design of professional development programs for ELT teachers
2. Guidance for creating institutional guidelines and support systems for AI integration
3. Strategies for balancing technological innovation with human aspects of teaching

The study's findings can help:

1. Teachers and researchers design effective AI-assisted instructional interventions
2. Institutions develop infrastructure and training programs for AI implementation
3. Policymakers create balanced strategies for AI integration in ELT

Moving forward, these insights can guide the development of more effective AI integration strategies in ELT. By considering the practical experiences and perspectives of instructors, stakeholders can make informed decisions that balance technological innovation with pedagogical best practices, ultimately enhancing the quality and effectiveness of language instruction.

Suggestions for Further Studies

This study provides a foundation for future research on AI integration in ELT. Based on our findings, several key areas warrant further investigation.

Future studies could expand to a wider variety of educational settings, including public universities, secondary schools, and language institutes across national borders. This expansion would allow for comparative analysis of how different institutional cultures, resources, and policies affect AI tool effectiveness and acceptance.

Longitudinal research is necessary to examine the long-term impacts of AI integration in ELT. While this study offers a cross-sectional view, future research could track changes in instructors' beliefs and behaviors over time as they use AI more frequently. This approach would provide insights into the sustainability and long-term effects of AI-enhanced teaching methods.

To gain a more comprehensive understanding, future studies could employ mixed methods approaches. Incorporating quantitative measures like surveys and experimental designs alongside qualitative analysis could provide statistical insights and aid in validating findings across various educational contexts.

Investigating the viewpoints of other stakeholders, including students, administrators, and policymakers, is crucial. This broader perspective could offer a more holistic view of the benefits and challenges associated with AI tools in ELT. For instance, understanding students' perceptions of AI-enhanced learning could help in customizing these resources to better suit their needs.

An important addition to future research would be to examine how teacher demographics influence AI adoption and effectiveness in ELT. This could reveal how factors such as age, teaching experience, or technological proficiency impact the integration of AI tools in language teaching.

In conclusion, future research can build on the insights gained from this study by expanding to diverse contexts, utilizing longitudinal and mixed-methods approaches, involving multiple stakeholders, and considering teacher demographics. These initiatives will contribute to more effective, fair, and innovative applications of AI in ELT.

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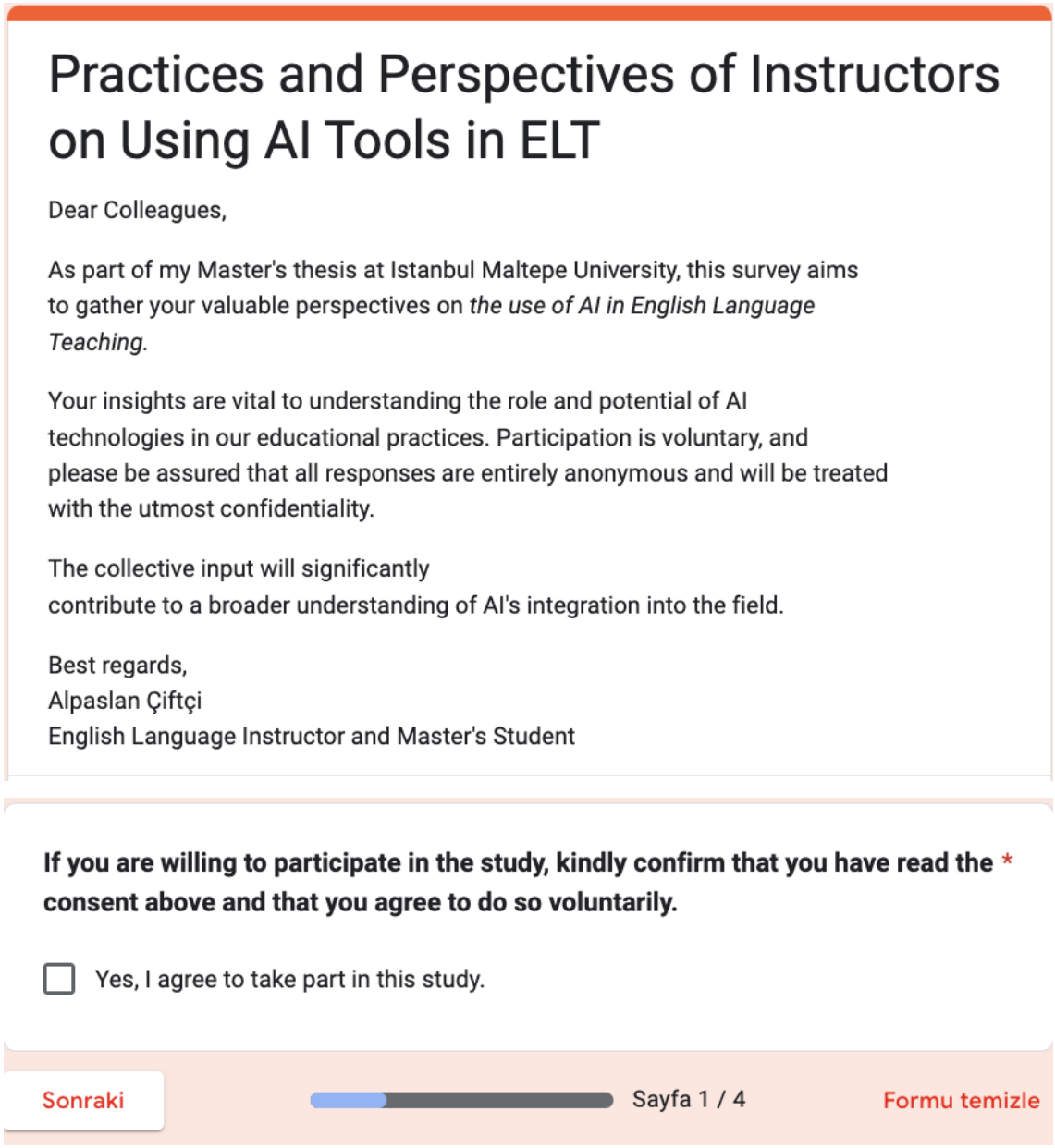
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APPENDICIES

Appendix-1: Informed Consent Form and Information on the Study

INFORMED CONSENT FORM AND QUESTIONNAIRE QUESTIONS



Practices and Perspectives of Instructors on Using AI Tools in ELT

Dear Colleagues,

As part of my Master's thesis at Istanbul Maltepe University, this survey aims to gather your valuable perspectives on *the use of AI in English Language Teaching*.

Your insights are vital to understanding the role and potential of AI technologies in our educational practices. Participation is voluntary, and please be assured that all responses are entirely anonymous and will be treated with the utmost confidentiality.

The collective input will significantly
contribute to a broader understanding of AI's integration into the field.

Best regards,
Alpaslan Çiftçi
English Language Instructor and Master's Student

If you are willing to participate in the study, kindly confirm that you have read the consent above and that you agree to do so voluntarily. *

☐ Yes, I agree to take part in this study.

Sonraki Sayfa 1 / 4 Formu temizle

PART 1

Age *

- ◯ 22-32
- ◯ 33-43
- ◯ 44-53
- ◯ 53+

How many years have you been teaching English? *

- ◯ 1
- ◯ 2-5
- ◯ 6-10
- ◯ 11-15
- ◯ 15>

What is your highest level of education? *

- ◯ Bachelor's
- ◯ Master's
- ◯ Doctorate

PART 2

On a scale from 1 (Not at all familiar) to 5 (Extremely familiar), how would you rate your familiarity with AI tools in education? *

- [ ] 1 (Not at all familiar)
- [ ] 2 (Somewhat familiar)
- [ ] 3 (Moderately familiar)
- [ ] 4 (Very familiar)
- [ ] 5 (Extremely familiar)

How often do you use AI tools in your teaching practice? *

Seçin

Please describe your initial thoughts and feelings about using AI tools in English Language Teaching *

Yanıtınız

Which AI tools have you incorporated into your teaching? (ChatGPT, Twee, Almanack.ai etc.)
Please specify and share how you have used them to support language skills.

Yanıtınız

From your experience, what specific benefits have you noticed from integrating AI in teaching? *
Please share any examples where these benefits were evident.

Yanıtınız

Can you describe any challenges you've encountered while using AI tools in your teaching, and how have you addressed them? What solutions or strategies did you find effective? *

Yanıtınız

How have you adapted AI tools for students at various proficiency levels, such as A1 or B2? *

Yanıtınız

Would you be interested in attending workshops focused on integrating AI into teaching? What specific areas or skills would you like these workshops to cover? *

Yanıtınız

Would you be interested in attending workshops focused on integrating AI into teaching? What specific areas or skills would you like these workshops to cover? *

Yanıtınız

What feedback have you received from students regarding the use of AI tools in your classes? How has this feedback influenced your teaching approach? *

Yanıtınız

Is there anything else you'd like to share about your experiences or thoughts on using AI in ELT?

Yanıtınız

PART 3

Would you be willing to participate in a brief follow-up interview to discuss your perspectives on AI in English Language Teaching in more depth?

This interview will provide an opportunity to explore your experiences and insights further.
The interviews will be audio taped to be analysed by the researcher. The recordings will be kept anonymous and used only for the current study.

If you are interested, please provide your name and email address below, and the researcher will contact you with more details.

In case you are willing to join the second part of the study and help with further analysis, please click the consent option below.

(If you do not want to participate in the second part of the study, you can skip this question.)

☐ I agree to participate in the second phase of the study.

Please provide your name and email address

Yanıtınız

INFORMED CONSENT FORM

Dear Participant,

Thank you for agreeing to take part in this interview. As part of my Master's thesis at Istanbul Maltepe University, I am conducting research to understand the perceptions and experiences of ELT instructors like yourself regarding the use of AI tools in English Language Teaching. Your insights are invaluable and will contribute significantly to our understanding of AI's integration into our field.

Please know that your participation is entirely voluntary, and you may withdraw at any time. All information you provide will be kept confidential and will only be used for the purpose of this research. The interview should take approximately 15-20 minutes. If you have any questions before we begin, please feel free to ask.

Once again, thank you for your time and willingness to contribute to this important research.

Alpaslan Çiftçi

English Instructor

I, hereby, confirm to take part in the study.

Participant’s Signature:

Participant’s Name:

1. "Can you briefly describe your first experience with using AI in teaching? What specifically stood out to you during this initial encounter?"

2. "Could you share one significant benefit you've observed from using AI in your teaching and how it has impacted your or your students' learning experience?"

3. "What's a particular challenge you've encountered with AI tools, and how did you address it? How did overcoming this challenge affect your teaching approach?"

4."In what ways have you adapted AI tools for students at different proficiency levels? Please provide a specific example of how you implemented these adaptations."

5. "What kind of feedback have you received from students about using AI tools? Can you describe any changes you've made to your teaching approach based on this feedback?"

6. "What specific support or knowledge do you believe would help you and other instructors use AI tools more effectively? Are there particular areas where you feel additional training or resources are needed?"

7. "How do you envision the role of AI in English Language Teaching evolving over the next few years? Are there any specific developments you hope to see or concerns you have?"

8. "Is there anything else about your experience with AI in teaching that you'd like to share or discuss that we haven't covered yet?"

Appendix-2: Transcription of the Interviews and Essays

"Bu belge, Yükseköğretim Kurulu tarafından 19.01.2021 tarihli *"Lisansüstü Tezlerin Elektronik Ortamda Toplanması, Düzenlenmesi ve Erişime Açılmasına İlişkin Yönerge"* ile bildirilen 6698 Sayılı Kişisel Verilerin Korunması Kanunu kapsamında gizlenmiştir.

Appendix-3: Maltepe University Ethical Clearance

"Bu belge, Yükseköğretim Kurulu tarafından 19.01.2021 tarihli *"Lisansüstü Tezlerin Elektronik Ortamda Toplanması, Düzenlenmesi ve Erişime Açılmasına İlişkin Yönerge"* ile bildirilen 6698 Sayılı Kişisel Verilerin Korunması Kanunu kapsamında gizlenmiştir.

CURRICULUM VITAE

Alpaslan ÇİFTÇİ

Education

Degree	*Year*	*University , Institute, Department*
MA	2024	Maltepe University, Graduate School, Department of Foreign Languages, English Language Teaching
BA	2020	Karadeniz Technical University, Faculty of Letters Department of Western Languages and Literature, English Language and Literature
High School	2015	Selim Şehit Teğmen Gökhan Yaşartürk ÇPAL

Work Experience

Year	Job
2021 - 2024	English Instructor, Istanbul Medipol University

Accomplishments

Year	*Accomplishment*
2024	Fulbright Foreign Language Teaching Assistant Scholarship
2022	Scholarship for Graduate Students – Council of Higher Education
2021	Top 10 Instructors of Language School – Medipol University
2017	Erasmus+ Exchange Program (Poland)