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**ENHANCING FOREIGN LANGUAGE LEARNING THROUGH GAMIFICATION
USING AN ADVANCED LANGUAGE MODEL**

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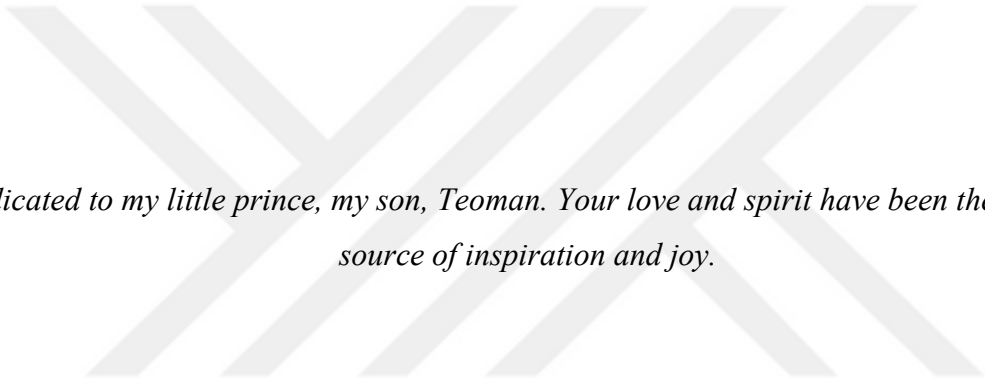
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TEZ ÇALIŞMASI ORJİNALLİK RAPORU

Enhancing Foreign Language Learning Through Gamification Using an Advanced Language Model başlıklı tez çalışmamın toplam **76** sayfalık kısmına ilişkin, 21/07/2025 tarihinde tez danışmanım tarafından **Turnitin** adlı intihal tespit programından aşağıda belirtilen filtrelemeler uygulanarak alınmış olan orijinallik raporuna göre, tezimin benzerlik oranı **%12** olarak belirlenmiştir.

Uygulanan filtrelemeler:

1. Tez çalışması orijinallik raporu sayfası hariç
2. Bilimsel etik beyannamesi sayfası hariç
3. Önsöz hariç
4. İçindekiler hariç
5. Simgeler ve kısaltmalar hariç
6. Kaynaklar hariç
7. Alıntılar dahil
8. 7 kelimedenden daha az örtüşme içeren metin kısımları hariç

Necmettin Erbakan Üniversitesi Tez Çalışması Orijinallik Raporu Uygulama Esaslarını inceledim ve tez çalışmamın, bu uygulama esaslarında belirtilen azami benzerlik oranının (%30) altında olduğunu ve intihal içermediğini; aksinin tespit edileceği muhtemel durumda doğabilecek her türlü hukuki sorumluluğu kabul ettiğimi ve yukarıda vermiş olduğum bilgilerin doğru olduğunu beyan ederim.

21/07/2025

Beyza AKINCI

Doç. Dr. Galip KARTAL

BİLİMSEL ETİK BEYANNAMESİ

Bu tezin tamamının kendi çalışmam olduğunu, planlanmasından yazımına kadar tüm aşamalarında bilimsel etiğe ve akademik kurallara özenle riayet edildiğini, tez içindeki bütün bilgilerin etik davranış ve akademik kurallar çerçevesinde elde edilerek sunulduğunu, ayrıca tez hazırlama kurallarına uygun olarak hazırlanan bu çalışmada başkalarının eserlerinden yararlanılması durumunda bilimsel kurallara uygun olarak atıf yapıldığını ve bu kaynakların kaynaklar listesine eklendiğini beyan ederim.

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SYMBOLS AND ABBREVIATIONS

Abbreviations

AI: Artificial intelligence

EFL: English as a Foreign Language

KET: Key English Test

WTC: Willingness to communicate

NLP: NLP

ALM: Advanced language models

ÖZET

Necmettin Erbakan Üniversitesi, Eğitim Bilimleri Enstitüsü
Yabancı Diller Eğitimi Anabilim Dalı
İngiliz Dili Eğitimi Bilim Dalı
Yüksek Lisans Tezi

GELİŞMİŞ BİR DİL MODELİ KULLANILARAK OYUNLAŞTIRMA YOLUYLA YABANCI DİL ÖĞRENİMİNİN GELİŞTİRİLMESİ

Beyza AKINCI

İkinci bir dil öğrenmek, 21. yüzyılda başarılı olabilmek için öğrencilerin sahip olması gereken önemli bir beceridir. Buna dayanarak, ikinci dil öğrenimi, yeni metotları ve kavramları öğretme ve öğrenme sürecine entegre etme durumunda kalmıştır. Bu çalışma, gelişmiş dil modelleriyle oluşturulan oyunlaştırılmış etkinliklerin, dil öğrenenler arasında motivasyonu, iletişim isteğini ve öğrencilerin konuşma becerilerini geliştirmedeki etkinliğini incelemektedir. Araştırma, Necmettin Erbakan Üniversitesi Yabancı Diller Yüksekokulu'nda öğrenim gören İngilizce hazırlık sınıfı 1. sınıf öğrencilerinin gelişmiş bir dil modeli kullanılarak oyunlaştırma yoluyla yabancı dil öğrenimlerini geliştirmeyi amaçlamaktadır. Bu çalışma, yaşları 18-21 arasında değişen, 26'sının kontrol, geriye kalanın ise deney grubunu oluşturduğu toplam 54 İngilizce hazırlık sınıfı öğrencilerini kapsayan, ChatGPT 4 versiyonu kullanılarak oluşturulan oyunlaştırılmış etkinliklerin deney grubuna sınıf ortamında uygulanması ile gerçekleştirilmiştir. Araştırma da hem nicel hem nitel yöntemleri kapsayan karma yöntem kullanılmıştır. Veriler ön ve son testler, konuşma becerisi testleri, Google forms üzerinden oluşturulan iletişim kurma isteği anketi ve görüşme soruları ile toplanmıştır. Toplanan verilere göre, deney grubu ve kontrol grubuna uygulanan ön ve son testler arasında anlamlı bir fark olduğunu ortaya çıkartmaktadır. Bu çalışma, gelişmiş dil modelleri yani yapay zeka kullanımının yabancı dil öğrenimindeki rolünü vurgulamaktadır. Bu çalışmanın sonuçlarının, gelişmiş dil modelleri kullanarak oyunlaştırma yöntemiyle, yabancı dil öğrenimini daha motive edici, eğlenceli ve akılda kalıcı hale getirebileceği gerçeğini ortaya koyması beklenmektedir.

Anahtar Kelimeler: yabancı dil öğrenimi, gelişmiş dil modelleri, ChatGPT, oyunlaştırma, motivasyon, iletişim kurma istekliliği

ABSTRACT

Necmettin Erbakan University, Graduate School of Educational Sciences
Department of Foreign Language Education
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Master Thesis

ENHANCING FOREIGN LANGUAGE LEARNING THROUGH GAMIFICATION USING AN ADVANCED LANGUAGE MODEL

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One major competence for learners in the 21st century is acquiring a second language (L2). Based on this, second language learning has had to integrate new methods and concepts into the teaching and learning process. This study examines the effectiveness of gamified activities created with advanced language models in improving language learners' motivation, communication desire, and speaking skills. The research aims to improve the foreign language learning of first-year English preparatory class students studying at Necmettin Erbakan University School of Foreign Languages through gamification using an advanced language model. This study was carried out by applying gamified activities created using the ChatGPT 4 version to the experimental group in the classroom environment, including a total of 54 English preparatory class students, aged between 18 and 21, 26 of whom were in the control group, and the remaining were in the experimental group. A quasi-experimental and a mixed method, covering both quantitative and qualitative methods, were used in the research. Data were collected through pre- and post-tests, speaking skill tests, a WTC survey created via Google Forms, and interview questions. The data collected indicates a notable difference between the pre- and post-tests administered to both the experimental group and the control group. This research highlights the significance of sophisticated language models, specifically the application of AI, in the context of foreign language acquisition. This study aims to demonstrate that gamification techniques utilizing advanced language models can enhance the motivation, enjoyment, and retention in foreign language learning.

Keywords: Foreign language learning, advanced language models, ChatGPT, gamified, motivation, WTC

CHAPTER 1

1. INTRODUCTION

This chapter provides an overview of the study, outlining its organization, including the problem statement, purpose, significance, assumptions, limitations, and key definitions.

1.1. Statement of the Problem

Foreign language learning, especially enhancing English-speaking skills, remains a significant challenge for learners (Kırkgöz, 2007). In Türkiye, willingness to communicate (WTC) is one of the biggest obstacles to language learning (Kartal & Balçikanlı, 2018). Students often avoid participating in English-speaking activities due to a lack of self-confidence, fear of making mistakes, and insufficient practice opportunities (MacIntyre & Doucette, 2010). This situation is also related to the fact that English language education in Türkiye is primarily focused on grammar and exams. The lack of communication-oriented approaches limits students' opportunities to practice their speaking skills in real life and negatively affects their language learning process (Eksi & Yesilcınar, 2016). Within the Turkish context, research on these issues highlights, in particular, the deficiency in speaking practice. A study conducted by Tavil (2010) indicates that educators typically prioritise grammar and writing abilities over the enhancement of speaking skills. In a similar vein, Kırkgöz (2007) argued that the materials and teaching methods employed in English classes fall short in effectively enhancing students' communication skills. In addition, it is emphasized that course contents are generally monotonous and insufficient to attract students' interest (Doğruer et al., 2010). This situation prevents students from actively participating in language learning processes and deepens the deficiency in speaking skills. Data on international language proficiency exams also confirm this situation. Students in Türkiye demonstrate performance levels that fall short of the global average, particularly in their speaking abilities (Dağtan & Cabaroğlu, 2022). The findings suggest that English language education often falls short in developing communication-oriented skills. The Turkish education system significantly restricts students' confidence and practical use of English in real-life situations due to the absence of interactive and immersive environments essential for speaking practice (Ozbek et al., 2017).

In this context, the adoption of new pedagogical practices could certainly help address these issues. More specifically, activities based on the use of AI-supported language models, such as ChatGPT, could address this limitation by allowing students to practice the language in

real-world situations (Deterding et al., 2011). Some studies conducted in Türkiye have shown that technology-assisted language learning is effective. For example, Çelik and Yavuz (2018) identified the use of technology for language learning as a means to enhance student motivation and provide more opportunities for language practice. Likewise, research evidence in the language education literature demonstrates how gamification approaches can enhance learner engagement and interest when learning a language (Hamari & Koivisto, 2014). Therefore, it is clear that combining AI tools like ChatGPT with gamification can make language learning processes more enjoyable and effective. While gamification elements (e.g., points, badges, levels, competition) have been shown to motivate students, ChatGPT offers the opportunity for interactive, personalized feedback to students (Bian et al., 2023), which can help reduce student fears about making mistakes or errors and boost their confidence about using the language.

This study focused on the effects of ChatGPT-generated gamification activities on students' WTC and speaking skills. In addition, it was examined whether there is a significant difference between the group supported by gamification and the group not supported by gamification. In light of previous research in the Turkish context, this study aims to provide an innovative and effective solution to the primary problems in English-speaking skills. In this context, it aims to explore how combining ChatGPT and gamification in language learning can enhance student achievement.

1.3. Purpose of the Study

The specific objective of this study is to provide innovative solutions to the difficulties encountered in English language learning. In particular, the main goals of the research are to make the course content, which students find monotonous and boring, more engaging and entertaining, to enable students who struggle with speaking skills to improve these skills, and to encourage students who are reluctant to speak English to become more willing to participate in this process. In this study, language activities created by the teacher through ChatGPT with elements of gamification are applied in the classroom in the context of the study. The activities aim to increase students' opportunities for practicing language use in real-life situations, reduce their anxiety about making mistakes, and foster increased self-esteem. The students do not interact directly with ChatGPT in these activities; instead, teacher-structured activities are utilized in the classroom learning process.

The gamification technique aims to enhance enjoyment in language learning and increase students' engagement in the learning process (Dehghanzadeh et al., 2021). This method

incorporates gamification elements, such as scoring, levels, and rewards, to increase students' motivation and active participation in English-speaking activities (Shortt et al., 2023). The application is hypothesized to produce benefits, particularly for students who otherwise avoid speaking practice due to the fear of making mistakes.

At the same time, this study aims to contribute to the development of real-life communication competence in students who lack English speaking skills by increasing their self-confidence. To overcome students' reluctance to language learning and to involve them in the learning process, the effects of activities prepared by the teacher using ChatGPT were evaluated in terms of speaking skills and WTC.

In this context, the research aims to present an innovative model that provides a solution to the common issues of a lack of speaking skills and motivation in the English language education system in Türkiye. The focus was on the potential of these gamified activities, designed by the teacher and implemented in the classroom, to enhance students' speaking skills, boost their motivation for language learning, and generally improve the effectiveness of their learning process. In order to achieve the purpose of the research and to examine the determined targets in depth, the following questions will be answered:

1. To what extent do ChatGPT-generated activities contribute to learners' WTC in real-life language contexts?
2. To what extent do ChatGPT-generated activities enhance learners' speaking skills?
3. Is there a significant difference between the group whose English language learning is supported by gamification using ChatGPT and the group whose English language learning is not supported?

1.4. Significance of the Study

It is hoped that this research will make a significant contribution, both theoretically and practically, in providing an innovative perspective on the main problems of English language teaching. English is one of the most important languages that individuals need today in the context of global communication, academic progress, and professional development (Clyne & Sharifian, 2008). However, English language education in Türkiye has structural and pedagogical deficiencies, especially in the development of speaking skills (Aydınlı & Ortaçtepe, 2018). Students' reluctance towards language learning, due to reasons such as a lack

of self-confidence, fear of making mistakes, and insufficient speaking practice opportunities, is a problem frequently emphasized by research (Hanifa, 2018). This research offers innovations for enhancing speaking skills in English language acquisition processes and countering a lack of motivation towards language learning. More specifically, it seeks to enhance the dynamism and effectiveness of learning processes by leveraging gamified, collaborative, and interactive experiences using ChatGPT. Gamification techniques have the potential to increase student engagement with learning materials by transforming more routine and passive learning processes into entertaining and motivating experiences (Zainuddin et al., 2020). In this respect, the current study examines whether teacher-prepared activities using ChatGPT, facilitated in classroom environments, offer a more effective and sustainable framework for language acquisition and learning.

This study aims to address an important gap within the English education system in Türkiye, where English instruction is typically grammar-based and students have limited opportunities to practice their speaking skills (Sönmez & Köksal, 2022). ChatGPT enables students and teachers to produce rich content, gamify it, and integrate it into a classroom environment, ultimately reducing students' fear of making mistakes and promoting their confidence in using the language in real-life situations. As a result, the research offers a new pedagogical approach to enhance students' speaking skills that goes beyond the confines of traditional formal teaching methods.

The international significance of this study is also noteworthy. AI and gamification-based approaches are common in Language learning all over the world and are changing educational processes. However, classroom and applied studies examining the effects of using these approaches are limited (Turnball et al., 2020). This study offers a tangible example to fill the knowledge gap and measure the impact these technologies have.

Another important dimension of the study is its practical implications for teachers and education policy. When teachers reformulate their classroom activities through tools like ChatGPT, it does not just enhance the individual achievement of students. It also offers a more innovative model that can be integrated into the education system (Özer, 2023). In this sense, the research can inform the development of new policies and guide changes in teaching practices within the specific context of English language education in Türkiye.

In conclusion, this study aims to address the structural shortcomings of English language education in Türkiye and to create innovative approaches to language learning processes from an international perspective. It is intended that through the combination of ChatGPT and gamification strategies, there will be marked improvements in students' speaking skills as well as increases in motivation and overall learning processes. The study will provide an important academic and practical contribution in exploring new pedagogical models and showcasing the impact of technology-supported pathways within the language education sector.

1.5. Assumptions of the Study

Implementing gamification principles in foreign language learning can lead to increased learner motivation, engagement, and language proficiency development. The assumption indicates that gamified activities can generate an engaging and enjoyable learning experience, favorable to active engagement and effective language learning. The learners will tacitly accept the gamification approach and the advanced language model approach to their language learning. Learners should be accustomed to the technology component of the approach, engage in the gamified activities, and see the gamified activities as an asset for language acquisition. Learners and educators have access to the elements of the technology and infrastructure to execute gamified activities, including GPT and apps, and language models overall. It is assumed that learners will be reasonably able to access devices, computers, tablets, or smartphones, and have reliable internet access to use the advanced language model effectively.

Educators possess the background knowledge, skills, and pedagogical approaches to design and operationalize gamified activities with an advanced language model. The assumption here is that educators can properly scaffold and support learners with gamified tasks, connecting them to their teaching goals and students' learning experiences, and enabling students to engage in purposeful and meaningful language learning. The results and conclusions from this study are transferable to other foreign language learning contexts. This assumes that the knowledge gained from this exploration of gamification and advanced language models extends to other contexts that contribute to the language education landscape.

1.6. Limitations

This study has certain limitations. In the research, only ChatGPT was used among AI tools. Initially, version 3.5 of ChatGPT was used in the study, but it was upgraded to version 4.0 during the research process. This implies that the differences arising from the characteristics

of the AI model developed over time may affect the research findings. Furthermore, the study was conducted only with elementary students in the preparatory class of Necmettin Erbakan University, and generalization of the results to other levels of language learners or to different institutional contexts is limited. However, the design and implementation of the activities generated by ChatGPT were explicitly developed for the research, so the applicability of this design in other contexts may be limited. Since the study only analyzed data obtained over a specific period, these results may be insufficient to demonstrate long-term effects. These limitations determine the scope of the research findings and enable the provision of suggestions for future studies.

1.7. Definitions

For a better understanding of the study, the following terms are defined in the context of this research.

Gamification: An application of game elements and mechanics to non-game contexts to engage and motivate individuals.

Advanced Language Model: It refers to a sophisticated computational system that can understand and generate human-like text, capable of performing various language-related tasks.

Foreign Language Learning: It is the process of acquiring proficiency in a language that is not one's native tongue, typically through study, practice, and immersion in the target language.

EFL (English as a Foreign Language) classroom: It is an educational setting where English is taught as a non-native language to students whose first language is different.

Language proficiency: Language proficiency refers to the level of competence and ability that a learner possesses in using a language.

CHAPTER 2

2. LITERATURE REVIEW

Learning a second language is essential for thriving in a multicultural setting that is becoming increasingly challenging due to the expansion of globalization (Lie, 2017). A primary reason for its significance is the need to comprehend and convey information in a universally understood language. Thus, English serves as the principal language for disseminating results and conducting multidisciplinary research (Muresan & Pérez-Llantada, 2014). This mental process of learning a language varies for everyone, which is why we need to employ new teaching methods to cater to the diverse ways people can process the knowledge we provide (Ferrari et al., 2012). However, it is still observed that some traditional teaching approaches are being used today, which is a challenge for today's students. In response to the limitations of conventional teaching methods and the diverse needs of language learners, various pedagogical approaches have been proposed. Among these, gamification has emerged as a promising strategy that introduces engaging and motivational elements into educational contexts (Richards et al., 2014).

This chapter provides a comprehensive overview of the existing research and literature on several key areas. It explores the definition, relevance, and importance of AI tools in educational contexts, with a particular focus on their application in language learning. Additionally, the discussion extends to the interplay between motivation, WTC, and the enhancement of speaking skills through the use of an advanced language model.

2.1. Gamification in education and foreign language learning

The book "Gamification in Education and Business," which was published in 2015, confirms that the term "gamification" was first used in 2014. Since then, the term 'gamification' has been used in several industries, such as media, education, training, and healthcare. Gamification refers to the application of game-design elements and principles in non-game contexts, aiming to increase engagement, motivation, and promote active participation (Sanchez et al., 2020). Beyond its practical applications, gamification is also supported by psychological theories that explain its influence on learner behavior and motivation, thereby reinforcing its pedagogical value. Richter et al. (2015) draw our attention to the importance of enhancing human psychological tendencies for competition, reward, and social recognition in order to facilitate behavioral change and improved performance. Competition and reward foster

intrinsic motivation in the learning environment, and thus, they impact learners' psychological states, such as happiness and eagerness to participate in class.

Kim and Castelli (2021) note that gamification can have a positive impact on behavior. In their meta-analytic study, Kim and Castelli quantify the effects of gamified interventions on behavioral change in students. The study's findings highlight that gamified interventions can be effective mechanisms for stimulating behavioral changes in learners, thereby producing better learning outcomes. Certain aspects of gamification target specific psychological elements, such as receiving medals and rewards, which can motivate individual satisfaction and competition (Helmefalk, 2019).

As Zeybek and Saygı (2024) mention, gamification is equally important in education. It provides our sense of fun, and in an educational setting, gamification is the application of gaming mechanics—points, badges, leaderboards, storytelling, and challenges—to engage learners and improve learning outcomes through increased engagement and motivation (Saleem et al., 2022). These tools are innovative and help activate curiosity in the students; stimulating interest in exploration is one of the building blocks of motivating students. There are a variety of case studies, including what has developed into online courses, where gamification has proved to be highly effective on virtual platforms. They have made a difference for the students, and the gamification was successfully adapted and utilized in specific contexts (Luo, 2022).

There are theoretical frameworks that can provide underpinnings for the use of gamification specifically, and Self-Determination Theory (SDT) and Flow Theory are two prominent examples. Self-Determination Theory includes a macro-theory of human motivation and personality with the focus on the individual's natural tendency to grow (and inherent psychological needs) that was developed by Richard Ryan and Edward Deci in 1985. SDT holds that gamification creates intrinsic motivation through the basic psychological needs of autonomy, competence, and relatedness (Botte et al., 2020). Flow Theory was first introduced in the book 'Beyond Boredom and Anxiety' (1975) by the Hungarian-American psychologist Mihály Csíkszentmihályi, who proposed that when people become fully immersed in an activity that is at their skill level, clear goals are established, and immediate feedback is applied, they enter the condition known as flow. Flow theory suggests that an optimal learning experience occurs when a learner has deep immersion in an activity and combines an even balance between the challenge of the task and their abilities (Liao, 2006). Gamification directly backs up these frameworks by producing "activities" that are enjoyable, demanding, and rewarding

simultaneously. With this theoretical basis, gamifying foreign language learning can meet the cognitive and affective needs of learners, thus making instruction increasingly effective. This theoretical and motivational basis has encouraged educators to pursue gamification within foreign language learning, where student motivation/engagement and anxiety are particularly salient.

Gamification in foreign language learning is an exciting new way to address the limitations of conventional methods and to make the learning process more fun and productive (Signori et al., 2018). Since introducing gamification into foreign language learning (FLL) can overcome obstacles that learners face, it is different from traditional methods of FLL. Zainuddin (2018) elaborates on the efficiency of gamification in FLL, suggesting that gamification produces interactive, engaging, playful, and low-anxious learning environments that encourage students to embrace them. These environments can help defeat common FLL challenges such as student disengagement, lack of motivation, and anxiety regarding language performance. Gamified activities turn tedious language drills into enjoyable experiences that considerably increase students' intrinsic motivation and sustained engagement within language tasks (Demirbilek et al., 2022).

The literature has highlighted many advantages to gamification in FLL, especially enhancing motivation, engagement, and learner autonomy. In the research study by Zhang and Hasim (2023), gamification is used to promote learner autonomy by allowing learners to follow their own learning paths, monitor their own progress, create their own goals, and critically reflect on their language growth. This perspective is supported by Yavuz (2020), who states that the gamification elements implemented in foreign language teaching allow students to take greater ownership over their learning and reduce their apprehension toward learning. The use of gamification in FLL classrooms is quickly expanding because it has been shown to provide students with rich and contextualized language learning experiences. As Buckley and Doyle (2016) noted, when students engage with the content on a meaningful level through gamification, they create opportunities for language practice through authentic language experiences. For this reason, teachers will design and utilize gamified tasks such as, quests, cooperative problem solving, role-playing scenarios, and response challenges, to assist students in acquiring linguistic competence. Landers et al. (2017) research also indicated that tasks of this nature have been rated as effective in replicating face-to-face interactions, which reduced

the anxiety, increased confidence, and increased participation of learners, and therefore, improved their language competence.

Gamification through tools and activities can take numerous forms in FLL environments, described as paper-based, digital-based, or kinesthetic tools. Paper-based tools include modified board games, card games, puzzles, crossword puzzles, and bingo, which support social interaction in groups, revise vocabulary for new contexts, and facilitate student conversations and communication (Tatli et al., 2023). Digital gamification tools have increased in number due to advancements in technology, ushering in a new age of this type of interaction in the FLL classroom, including tools such as Duolingo, Kahoot, Quizlet, and Classcraft (Koç & Sütçü, 2023). Duolingo is an example of a digital gamification tool that uses adaptive algorithms to individualize a student's learning experience. Digital gamification tools such as Kahoot! and Quizlet provided competitive yet cooperative contexts through quizzes and flashcard-based activities (Guaqueta & Castro-Garces, 2018). Both Kahoot! and Quizlet included immediate feedback for each student, showing their accurate scores while also encouraging student autonomy, as it was ultimately the student making the decision about their learning. Kinesthetic tools represent embodied cognition in action, encompassing tools and activities that involve active movement and physical engagement (e.g., role-play, drama activities, or interactive language-based scavenger hunts). These tools underline and even deepen the learning experience through physical activity and engagement (Kai-Kee et al., 2020).

Gamification has a significant effect on multiple aspects of FLL, especially listening, reading, writing, and speaking (Pingmuang & Koraneekij, 2022). All four skills of FLL can be improved through gamified environments where listening skills are also developed through audio challenges, multimedia stories, and podcasts, all in a game-like experience. Procell et al. (2024) emphasize the importance of listening in their reviews of research highlighting the abilities of attentive listening, auditory discrimination, and comprehension, all important aspects of language ability.

The use of gamification will enhance reading skills. Interactive narratives, digital stories, and reading comprehension tasks connected to gaming pique student interest while they work toward the reading text (Liu et al., 2025). These tasks generally come with on-the-spot feedback and rewards, leading to a desire to increase reading fluency, gain more vocabulary, and increase comprehension. According to Micari & Pazos (2021), gamified learning shapes

competition and collaborative reading tasks to heighten reading skills for both text-related interaction and learning from peers. Similarly, Cattoni et al. (2024) note that gamification develops writing skills through interactive and creative activities. This is certainly true when looking at learners who have been active in online collective storytelling, blogging, and writing challenges, all contributing to creativity and improvement in their writing based on these activities. Gamified writing tasks often support learners with organized prompts, engagement, and real-time feedback, making learners feel good about their progress, thus building writing confidence and the motivation to keep writing.

Gamification in speaking skills also allows for greater learner engagement, through the realization of less speaking anxiety. There are several empirical studies indicating that gamified communicative events, like debates, storytelling, role-play, and simulations, to positively improve oral fluency, pronunciation accuracy, and communicative confidence (Ruziyeva, 2024). Lin (2023) has also recently made a broadly similar point, identifying gamification as a means to reduce speaking anxiety while encouraging students to communicate more openly and freely, which is critical for authentic language development. In the same vein, Pujolà and Argüello (2019) argue that story-centric gamified activities allow students to practice their speaking and prepare for speaking in real-world situations. For example, using scenarios around travelling as a tourist, where students have to complete tasks such as booking a hotel, ordering food at a restaurant, or asking for directions, helps reinforce communicative skills necessary to function in day-to-day situations. Gamified scenarios allow students to combine their language knowledge to build confidence in communication. A fuller account of gamification in speaking skills is included in the next section.

2.1.1. Gamification and speaking skills

Baldwin (2007) defined speaking as the articulation of thoughts in spoken language, wherein individuals convey messages by verbalizing concepts. It is a medium of communication that facilitates learners in exchanging ideas to accomplish particular objectives or to articulate thoughts, aspirations, and intentions. Oral communication skills are vital for effective interaction in diverse contexts such as professional and educational settings (Tuomaitė & Zajankauskaitė, 2017). A large number of researchers and linguists addressed the subject of speech. Wand and Su (2000) assert that speaking is an essential ability for efficient communication, particularly in the realm of the internet. Bygate (1998) characterized speaking as an interactive process of meaning construction that encompasses the production, reception,

and processing of information. It is the process of constructing and disseminating meaning through the use of verbal and non-verbal symbols across diverse contexts. Furthermore, speaking is a priority for the majority of English language learners (Leong & Ahmadi, 2017). Thus, it holds significant value for all EFL learners. This value is particularly pronounced in speaking skills, given the crucial role speaking plays in effective communication.

Speaking is one of the most essential productive abilities in English (Ampa & Akib, 2019). Speaking is essential for students because it enables them to communicate with others and express themselves in English. As noted by Hybel and Weaver (2001), speaking is the skill of using words and their sounds to convey meaning, share thoughts, feelings, and views, and to educate, persuade, or amuse others. Chaney, as cited in Elsayed (2014), also regarded speaking as a process of constructing meaning interactively through the production, reception, and processing of information. Speaking is a crucial skill for EFL students, but many problems arise when they try to teach it. These problems might be caused by the way the lessons are taught, the lessons themselves, the classroom, or the students themselves. Teachers need to find new ways to teach English so that students can acquire these skills where they are needed. In response to this need for more engaging and effective methodologies, educators have turned their attention to gamification.

Gamification has become a new way to foster speaking skills in FLL (Luo, 2023). It has possible positive influences on the development of speaking skills (Rahmani, 2020). It uses positive interactions and motivational game components to promote active learner engagement. Specifically, to promote speaking skill development, gamification has been used more broadly to promote the oral proficiency in students, foster risk-taking without the fear of mistakes, and help them to communicate in real-life contexts (Reitz et al., 2019). Gamified tasks, such as role-plays, speech challenges, and interactive stories, present opportunities for learners to interact with the language and further promote its use. When gamified activities sustain this interaction, learners strengthen engagement and learning that helps them practice as often as possible to work toward learner fluency for communicative competence. For example, story-based tasks and simulations allow students to participate in dialogue, practice using the target language, and learn the natural flow of language (Prestopnik, 2016).

Studies show that gamified experiences also enhance speaking skills, instill confidence in students, and develop their self-esteem. The gamification uses elements that get students speaking independently to each other in class. Gamification elements like points, rewards, and

leaderboards alleviate students' speaking anxiety; therefore, they can help students to be fully immersed in speaking activity (Edwards, 2022). Gamification enhances a level of competitiveness that encourages students to improve themselves, and uses language actively at the same time. Thuy and Hung's (2021) study found that gamification-based speaking activities also lessen students' speaking anxiety and allow students to practice language in less stressful conditions, which also reduces students' worries of making mistakes. Gamification contributes to students' speaking fluency and pronunciation skills (Yaghoobi & Kazemi, 2023). Learners achieve fluency in a language by practicing the target language more frequently through story-based dialogue and context. According to Çelik and Yavuz's (2018) research, gamified speaking exercises supported by digital games can enhance students' speaking fluency and speed of word choices. Aydın (2013) found that elements of gamification - digital games and gamified tasks - significantly improved students' motivation to practice speaking and, at the same time, reduced the fear of making mistakes. The competition and playfulness introduced by digital games proved to reduce students' anxiety and foster a positive attitude towards learning the language, leading to increased participation in speaking activities during the language classroom. In addition, practical use of gamified apps right along with audio feedback technologies in other aspects of language learning helps students self-assess their pronunciation, and allows students to improve their speaking much faster by speaking in the moment. Zhang and Zou (2020) suggest that such apps have a significant impact on improving student speaking fluency and reducing pronunciation errors.

Not only does gamification support improving pronunciation and fluency, but it also serves as a valuable way to increase students' WTC in language learning contexts. Gamified learning contexts provide opportunities through points and leaderboards, badges and challenges, for learners to experience achievement and competition. Zainuddin (2018), for example, found that students on gamified tasks demonstrated a greater interest in school and were more willing to engage in course discussions unprompted. In this way, we can confidently argue that gamification is a sound pedagogy for improving language itself but also providing the potential for improving learners' WTC and, to a greater extent, involvement in communication.

2.1.2. Gamification and WTC

WTC refers to a person's orientation toward engaging in a communication behavior, when given a choice, especially in second or foreign language situations (Dörnyei, 1998). In

general, this orientation is associated with certain external variables and internal qualities, such as the environment, peer relations, traits, level of self-confidence, anxiety about speaking, and intrinsic motivation. WTC is said to carry significant weight in language acquisition, with respect to the 'frequency and quality' of learner engagement in the target language (Yashima, 2002). For example, learners expressing high WTC are more likely to enter into a broader range of communicative opportunities, which potentially improves their understanding not only of the language but also of how to build the sorts of interpersonal relationships and cultural connections that any successful language learner needs to develop. Furthermore, learners exhibiting lower WTC may develop more slowly in language development due to reduced meaningful language practice, resulting in decreased confidence and increased language anxiety. Given the important role of WTC in supporting meaningful learner interactions and effective language acquisition, educators and researchers must be able to identify and adopt instructional techniques, such as gamifying, to engage and maintain students' WTC. Gamification is an instructional technique promoted as effective because it is engaging and motivating by design, fostering the development of an environment that allows intentional, supportive, and low-stress opportunities that should decrease anxiety, increase motivation, and ultimately enhance WTC in the learning context.

As noted by Huseinović (2024), when gamification is integrated into language learning, it can significantly impact learners' WTC by creating an interactive, motivating, and less anxiety-inducing environment conducive to communication and interaction. One way gamification can promote WTC is by identifying affective barriers, such as anxiety, which often create a barrier for language learners in participating in communicative activities. Dichev et al. (2015) state that gamified environments engender positive emotions and less fear of error, which allow learners more communicative opportunities. Similarly, Chou (2019) states that games with points, leaderboards, badges, and immediate positive feedback motivate learners to participate in more interactions they may not actively wish to pursue. Gamification has a significant role in learners' willingness to begin to speak, as it increases intrinsic motivation. Alexiou and Schippers (2018) asserted that game mechanics such as narratives, avatars, and cooperative tasks provoke learner curiosity and a sense of accomplishment that can encourage intrinsic motivation. These features not only enhance the fun of learning but also create an encouraging and safe environment in which learners may feel more willing and ready to engage with one another, allowing them to be more willing to engage in conversation in the target language. Like Alexiou and Schippers, Jang (2008) argued that learners will engage in communicative tasks voluntarily when they find these tasks enjoyable and rewarding.

Gamified tasks increase learner engagement through the interactive and collaborative dimensions of tasks that promote social interaction and communicative practice in authentic contexts (Leftheriotis et al., 2017). With increased engagement, language learners can become more active agents in their development, shifting from completely passive consumers of information to confident actors during authentic communication situations. Gamified activity promotes peer interaction in an organized (and entertaining) format while at the same time developing learners' communicative competence, resulting in positive attitudes toward communication in the target language. The positive mood change is important; a positive attitude toward language increases interest, increases risk-taking, and helps longer-term language learning outcomes. If gamified tasks are designed well, they provide meaningful contexts for interaction. They also assist learners in the development of communicative self-confidence, which is also an important factor in fostering increased WTC (Alsawaier, 2018).

Recent research likewise supports the positive relationship between gamification and WTC. Zhang (2024) asserts that gamified language tasks increased learners' communicative participation. Further, findings indicated that gaming discounts learners' communication reluctance in the English classroom. Salbaş and Ekmekci (2025) similarly reported enhanced learner engagement and increased WTC in communicative tasks in language learning when strategies using gamification systems were included in educational learning processes. Likewise, a point recently made by Babakhani and Tabatabaee-Yazdi (2022) based on the emotional response related to gamification and reflection about digital-game-based activities as a predicted power of EFL learners' WTC in activities used in such environments. The findings indicated that the gamification treatment was effective and that gamified tasks had a novel impact on the willingness of intermediate English learners to discuss topics and collaborate. Another study by Bagherpour et al. (2022) suggests that the use of digital games has a notable impact on the WTC of intermediate learners. In the end, participants in the experimental group showed greater WTC than those in the control group. This is consistent with the data in John (2024). The study examined gamification in English language teaching as a means of establishing better rapport between teachers and students, enhancing teacher immediacy, and investigating the effects of WTC. The findings from the study indicate that gamification allows for rapport with teachers and teacher immediacy; it may allow for increased WTC.

With all this evidence, it appears that gamification is an effective pedagogical strategy for improving learners' WTC by motivating students, reducing anxiety levels, encouraging a willingness to take risks, and providing an interactive and authentic context for communication.

2.2. Artificial intelligence in education and foreign language learning

AI is among the technologies that effect radical changes in education during digital transformation (George & Wooden, 2023). The capability of artificial intelligence to offer individualized learning pathways, facilitate effective instruction, and enable data-driven decision-making processes positions AI as a contemporary transformative technology in educational systems today. However, as Singh et al. (2025) indicate, artificial intelligence usage in the educational processes could make pedagogical practices more effective, personalized, and accessible. Therefore, the emergence of AI in education is akin to a modern trend that cannot be easily framed as a theory, bridging to the present day and the commonplace site of practical application. While AI's practical use in education has become ubiquitous today, it was an evolutionary and gradual change. That is to say, to understand how AI became a norm in educational spaces, we must explore the historical emergence from the initial conceptualization of AI to the data-driven learning systems we see today.

Over the past several decades, the application of AI in education has progressed considerably from early on as rule-based systems to multi-part, integrated applications that utilize data (Ahmad et al., 2023). Consequently, educational technology has transitioned beyond a role to simply provide information to advanced technology that can respond dynamically to the needs of students, analyze, and personalize the educational process. The early use of AI in educational contexts is found earlier than today, but still not far in the past, when human tutors were being emulated through the application of intelligent tutoring systems in the 1970s and 1980s. Intelligent tutoring systems were created to offer adaptive feedback and guidance on structured subjects, such as mathematics or computer programming (Nwana, 1990). Many of these systems were intended simply as self-paced learning environments to support and influence an individual learner. Between the 1990s and early 2000s, AI research that included machine learning and natural language processing (NLP) was still under development and was starting to instantiate more physically rich and interactive educational spaces (Ayanwale et al., 2024). When big data and neural networks emerged in the 2010s, the evolution of AI tools began to inform more deeply personal learning experiences by evaluating learner behaviors in real-time and enabling many education-focused experiences from automated assessment to content generation (Strielkowski et al., 2024). As we enter this new era, AI is being increasingly utilized in both formal and informal learning contexts. This is a shift towards intelligent, learner-centered pedagogies that want to promote flexibility, autonomy, and engagement (Alam & Mohanty, 2023). The development of new capabilities

provided by artificial intelligence has really taken off in recent times in foreign language education.

Advancements in AI technology have influenced many areas of education in the last few years, particularly in the teaching of foreign languages (Kianinezhad, 2023). AI supports more personalized, engaging, and effective language learning experiences through intelligent tutoring systems, adaptive feedback, and NLP tools. For example, AI-enabled technologies help provide personalized learning paths, facilitate instant corrective feedback, and allow motivation through adaptive and interactive content. Many of the key benefits relate primarily to one of the major contributions of AI- the learning experience is individualized (Murtaza et al, 2022). Indeed, Rane et al. (2023) have also recently reported a broadly similar point, in that AI-powered platforms may examine learners' performance data in ways that will adapt how difficult, quick, or content-specific instruction attempts to address varying degrees of learner proficiencies and backgrounds within one classroom. In addition, AI is currently providing immediate processing on language use (especially writing and speaking) based on actual grammatical errors, proper or improper pronunciation, and vocabulary use at the moment (Abusahyon et al., 2023). This immediate feedback provides learners the opportunity to reflect on their errors and correct them at that moment in time, allowing learners to reinforce learning through timely intervention. Adaptive and responsive capacities contribute to AI's growing capability to accommodate customized learner needs. When these features are viewed collectively, they demonstrate how AI can bolster efficacy and pleasure in foreign language learning contexts.

AI not only supports personalization and real-time feedback but also fuels accessibility and inclusion in language education (Anis, 2023). Accessibility is essential to support various learner needs, especially for those who face geographic, physical, or time constraints to formal education. Accessibility and inclusion can also be more readily facilitated by the modality of education that AI tools can offer. AI tools and applications provide flexible learning opportunities that go beyond the traditional classroom walls. Thus, learners can access educational content at their convenience and from any location (Bansal, 2023). This is particularly useful for learners in remote and underserved areas and adult learners juggling education and other priorities. Furthermore, AI technologies can be configured to assist learners with special educational needs through features such as text-to-speech, speech-to-text, auto-captioning, and multilingual interfaces that help remove barriers derived from reading difficulties, hearing challenges, or language background (Orynbay et al., 2024). AI contributes to promoting educational inclusion by accommodating more varied learner profiles and creating

more equitable learning situations. While AI enhances learning outcomes, it also enhances access to quality language education globally. To understand how AI generates such diverse educational benefits, we need to examine the technological innovations underpinning these functionalities.

In addition to the rapid adoption of AI-based language learning tools, educational needs influenced by several factors are evolving. Globalization has changed how people perceive new languages; they don't want to learn a second language; they want to adopt it to their timelines, without timelines and in their preferred style (Dörnyei & Skehan, 2003). Traditional methods are simply incapable of addressing such flexibility; hence, AI-supported systems shine with their instant feedback, availability of content, and motivational components. Digital environments are increasingly ubiquitous and mandatory nowadays, especially following the pandemic, which has prompted and accelerated the adoption of these technologies by both institutional structures and individual users. Nowadays, students are practicing language skills, writing, and taking an active role in producing oral language using applications like ChatGPT, Duolingo, Grammarly, or Google Translate. In relation to changing expectations, AI tools are increasingly embedded with more gamified elements to provide students with greater engagement.

AI-assisted learning environments can enhance students' motivation and affect their rate of learning in a positive direction. Specifically, gamification - items like progress bars, level system, or points - can make the learning dynamic and engaging while facilitating interest in the lesson (Nah et al., 2014). These technologies must convey engaging content, making it easier for learners to participate actively. The ability to stream progress directly into the system encourages a more purposeful approach to learning, while also providing learners with the opportunity to assess their linguistic output with real-time feedback. Features like ongoing reinforcement, corrective outputs, and a system of learning monitoring may not only prove temporary motivation, but can also enhance an individual's interest in learning by providing some sense of self-efficacy. As Olivetti et al. (2020) point out, classes of technology improve learners' capacity to devote more energy and conceptualize language. It means that technology allows students to learn in more meaningful and profound ways. Beyond enhancing engagement, one of the most impactful aspects of AI tools has been their ability to give instant, personalized feedback.

One of the contributing factors to the efficacy of AI systems for language learning is the instant feedback provided (Huang et al., 2022). The timing of feedback is crucial in the process of identifying and correcting linguistic errors (also known as 'deviations'), especially with regard to learning retention. In a conventional classroom setting, this type of feedback is typically limited to the teacher and is also delayed. These applications provide dynamic, immediate detection of learners' linguistic errors, such as grammar, word choice, or pronunciation, along with suggestions to correct them overall (Katsarou et al., 2023). Consequently, the learner is able to not only see what he has done wrong but also understand why he has done it wrong due to the system's explanations, and therefore, the learner will engage with deeper learning. In addition to offloading the burden on the teacher, AI applications have emerged as influential pedagogical tools that allow the individual to learn from their own failure. When things like personalization, simultaneous correction, and continuous immersion and participation in the process are brought together, AI-based systems have the potential to yield far more effective overall results than conventional methods (Sarker, 2022). In addition to feedback systems, AI applications facilitate language acquisition using intelligent translation-based technologies.

AI-based translation tools provide significant facilities for foreign language learners to overcome the obstacles they face in daily communication (Madahana et al., 2022). Systems like Google Translate, DeepL, or Microsoft Translator use advanced NLP technologies to translate written and audio data in real time, making multilingual communication more accessible. These tools support vocabulary development and basic meaning-making skills, especially in the early stages of language learning. As noted by Fakher (2023), learners can quickly analyze unfamiliar words or complex sentence structures through these systems and thus experience less hesitation in their comprehension process. However, the function of these applications is not limited to providing instant translation. The alternatives offered by context-aware systems also help learners to recognize the polysemy of words and gain a more nuanced language awareness (Naveen & Trojovský, 2024). For example, seeing a phrase translated in different ways in different contexts can help learners develop a multidimensional rather than a one-dimensional grasp of the target language. Nevertheless, the contextual accuracy of existing technologies is still questionable. Automated systems may occasionally cause shifts in meaning in idiomatic or syntactic structures, which brings the risk of mislearning. For this reason, it would be healthier to consider translation tools as a complementary resource in language teaching rather than as a direct teaching tool (Deng & Yu, 2022). When used in conjunction with teacher guidance, these

applications can support students in developing their translation skills while at the same time allowing them to interact with digital texts without developing an addiction. At this point, the acquisition of digital literacy is crucial for students to approach these systems with a critical perspective (Warschauer, 2009). In conclusion, AI-based translation systems accelerate the comprehension process and contribute to vocabulary learning and recognizing the diversity of linguistic structures.

Speech recognition technology has evolved significantly in the past few years to dictate the pronunciation of foreign language learners (Shadiev & Liu, 2023). This technology has the capacity to analyze a learner's vocal performance for pronunciation accuracy, stress characteristics, intonational qualities, and general fluency into separate scores. Pronunciation scores provide an individualized level of analysis that is unlikely to be offered to students in a traditional classroom. This analytic reporting can now be available on digital spaces called AI-based applications, granting learners unprecedented flexibility during their learning. An example of how the flexibility is most apparent is in the pronunciation-based AI applications, such as the Personalized Pronunciation tool, which uses your own produced recording, allows the learner to listen to their own effort, compare their voice recording to the designs of reference voices, and accept the incorrect pronunciation alternatives the system suggests (Seaborn et al., 2021). This is where imitation and the ability to evaluate one's own production have simple analytic possibilities. Before using the ELSA Speak app, I personally relied on traditional classroom methods and spelling, linking vocal errors and reading errors to orthography (i.e., familiarization with a competitor's pronunciation or reading). In the ELSA platform, the app recognizes and analyses a user's vocal output in real-time, again providing feedback at the phonetic level. With each user utterance, the system recognizes pronunciation errors at the word or phrase level, and clearly highlights the differences on the displayed device, such as a phone or tablet, on a graph compared to the appropriate formal English native speaker voice when the vocalization meets the native speaker's (Kaiser, 2024). Additionally, when learners receive feedback describing what they need to correct, learning is engaged in and focused on correcting and being aware of the correction. This is useful for learners with limited means of practicing speaking, and thus, the applications are functional to support autonomous practice and exposure to the language through audio. Thanks to AI-supported pronunciation applications, students can repeat as many times as they would like, which may reduce their fears of making mistakes and, consequently, speaking anxiety (Ulutaş et al., 2025). Speaking in a foreign language can be daunting, and speaking applications allow learners to practice and become confident with the

repetition that, as described previously, will support the development of the shyness to speak and self-confidence. There is also a growing interest in artificial intelligence tools for aiding in verbal and written production processes similar to speaking and pronunciation systems.

In foreign language learning, writing is often one of the areas that develops later compared to other skills and requires more cognitive processing (O'Brien, 2004). Therefore, supporting students during the writing process can affect not only the quality of the text but also their commitment to it. AI-supported writing tools offer functional solutions that facilitate students' technical and content progress during this process (Alharbi, 2023). Widely used systems like Grammarly perform grammar checks and analyze elements such as word choices, sentence structures, writing consistency, and tone simultaneously, providing users instant feedback (Ingle, 2023). In this way, students not only correct their writing but also have the opportunity to question and improve their writing style. In addition, platforms like Write & Improve can reveal which structural areas students have made progress in over time or which types of errors they frequently repeat by comparing the texts they have written. This data allows the students to observe their development and facilitates teachers' providing more targeted individual feedback (Aljuaid, 2024). Thus, writing becomes not just a product but a process-based and developmental activity. AI-based systems provide students with corrections while helping them develop text organization and restructuring skills. The writing tasks offered by these systems allow students to practice fundamental writing abilities, such as forming paragraphs, organizing introductions, and constructing arguments. Additionally, features such as improved word suggestions to enhance meaning and assist in creating more fluent sentences enable these tools to act as digital writing coaches (Pinzolit, 2024).

All these findings clearly demonstrate how AI-powered tools offer immersive, personalized, and interactive learning experiences in language learning. In recent years, however, one of the most striking examples of these technological developments is the increasingly central role that Advanced Language Models (ALMs) are playing in language teaching. In particular, the language comprehension, generation, and correction capabilities of generative AI models are pushing the boundaries of traditional language teaching methods and offering learners unprecedented learning opportunities. In the following, we will discuss in detail what advanced language models are, how they have evolved, and how they are transforming foreign language teaching.

2.2.1. Advanced language models

The current chapter provides some commentary on the term "advanced language model" in the title of the thesis and in the literature, which are more typically referred to as large language models (LLMs). LLMs are AI systems that are trained on large-scale datasets due to having billions of parameters and characterized by wide-ranging multi-objective language processing capabilities. Many of the studies that the author encountered in the process of finding literature used this technical term; model architectures, performances, and application areas were discussed as "large language models". Therefore, within this section and in an effort to align with the literature, the author will use advanced language models interchangeably with large language models.

The increasing influence of AI on language education is largely attributed to rapid developments in the relevant technologies, especially in the area of NLP (Alam, 2021). The primary innovation derives from advanced language models that provide sophisticated AI capabilities to understand, generate, and communicate via natural human language (Nie et al. 2024). Advanced language models (ALMs) are a significant development that allows machines to understand, generate, and communicate with a high degree of fluency and contextualization in human language (Nie et al. 2024). ALMs are the basis of many AI-based language learning tools and applications like intelligent chatbots, automated writing assistants, and personalized speaking platforms. These ALMs utilize deep learning methods with transformer structures; these approaches can capture complex language patterns and generate language outputs that allow for near-human-like communication interactions (Nassiri & Akhloufi, 2023). From a variety of information technology possibilities, greatly helping to facilitate (big data analytics, machine learning, and NLP), ALMs are being used in a multitude of ways, including designing learning materials, delivering content adapted to differing individual learning rates, and identifying student needs (Kim et al., 2022). The potential of broadband and advanced language models extends beyond that of understanding, through their ability to generate contextually relevant and coherent text, as well as translations and performances, giving personalized feedback. To appreciate the importance of advanced language models in everyday language learning, it is essential to understand their historical and technical progression over the years, from simple statistical methods to the complex neural architectures we employ today.

ALM has a history spanning several decades, beginning with early studies in computational linguistics and NLP (Hadi et al., 2023). Early language modelling approaches (known as statistical or distributional language models) made use of statistical models based on probability distributions, especially n-gram models, which guided language modelling for most

of the late 20th century (Ji et al., 2025). Earlier models in the region of the 20th century did not fully account for the complexity of languages or the contextual richness of different interactions.

A new turning point came about when deep learning methods based on neural networks and recurrent neural networks (RNNs) were introduced in the early 21st century (Aggarwal, 2018, p.3). Deep learning models increased our understanding and generation of sequential language data with Long Short-Term Memory (LSTM) networks, which were able to provide improvements in these models by handling the vanishing gradient problem using recurrent architectures (Van et al., 2020). Although the models demonstrated significant improvements, models based on recurrent networks struggled to process long texts and perform context-based prediction, particularly when it came to long-range dependencies; however, they presented new problems by not taking into account long-range dependencies, and the issue of processing required a higher number of tokens. The introduction of a new architecture with transformer-based systems introduced by Vaswani et al. (2017), particularly through the introduction of self-attention mechanisms. The transformer architecture enabled a more nuanced understanding of text context by allowing the model to focus on distinct parts of the text sequence without processing the data sequentially. Currently, the literature on ALM is limited, and the available reviews are primarily an overview of the field.

Using the ideas of ALM, Wang et al. (2024) demonstrated the possibilities of these models. In their study, the authors noted that ALM-based teaching-assisting models are currently being explored in education research to leverage ALM's unmatched capacity to reason and solve problems. These assisting algorithms may help teachers shift their focus to in-class teaching, which is not currently a focus of machine learning, while removing previously laborious and mundane tasks.

The incorporation of ALMs in language teaching and learning has valuable effects in terms of motivation, but also in terms of measurable academic success. ALMs have not only gained traction in language learning but have become pivotal learning resources due to rapidly evolving NLP technologies (Alqahtani et al., 2023). These models are characterized as AIs that are trained on a tremendous volume of language data and can replicate human-like language outputs. Particularly successful models like ChatGPT, GPT-4, BERT, and T5 stand out in the areas of producing, comprehending, and contextually interpreting usage of language (Raiaan et al., 2024). According to Nie et al. (2024), these models provide immediate, personalized, and context-specific feedback to learners, especially in foreign language learning, capitalizing on the interactive nature of the augmentation.

According to Murtaza et al. (2022), students gained significant writing proficiency after utilizing GPT-3-supported writing platforms as scaffolds. They created more successful writing than the control students, in terms of correct grammatical forms, context, and ideas behind the texts. The GPT (Generative Pre-trained Transformer) series of language models from OpenAI is an important example of the significant advancements, in terms of scale and sophistication, of ALM linguistic systems over the past few years. These models, trained on vast corpora, employ transformer approaches to enable the performance of complex language tasks with high fluency and contextual dimensions, thereby breaking traditional notions of how NLP can be utilized in educational settings. The scale and capacity of these models have made it possible to develop various ALM assistants, which are now being routinely deployed in foreign language education contexts.

According to Abusahyon et al. (2023), ALMs provide immediate feedback to students so that they can identify their mistakes, especially during written and oral production. These tools also support students' development of basic skills in language, like grammar, vocabulary, and pronunciation; they also contribute to a student's metacognitive awareness by giving an opportunity to evaluate performance. Particularly in skills that provide immediate feedback—such as speaking—the suggestions and corrections provided by ALMs help students produce accurate spoken language. These findings suggest that ALMs contribute to the functional use of language while simultaneously facilitating the theoretical learning portion.

Another study by Kasneci et al. (2023) examined the possible implications of advanced language models like ChatGPT on language learning. The authors noted the ability for these advanced models to offer learners individualized feedback and the potential for conversation practice in authentic dialogue. When considering that these models can also dynamically generate content that matches different levels of language learners, it is clear that learning in languages has become more flexible and pragmatic. In addition, the open and continuing use of these innovations in the educational arena raises a myriad of pedagogical and ethical considerations. While there are significant benefits for language learners from advanced language models, their use in educational settings inevitably changes the roles and responsibilities of teachers. With all the possibilities afforded by advanced language models, ChatGPT and its flexible and engaging features provide opportunities for language learners like none other.

While chatbot technologies have been increasingly adopted for foreign language learning in recent years, ChatGPT is among the most salient applications of chatbot technology

in the field (Pham, 2025). Whereas preceding chatbots provided limited and predominantly superficial interactions, ChatGPT is an advanced language model that provides a significantly improved opportunity for context-based and more individual-friendly communications with the user. The benefits of ChatGPT for a language learner, beyond speaking practice, encompass many more instances of writing development, vocabulary expansion, and content contextualization of communicational skills in real-world contexts. Thus, ChatGPT is a highly flexible resource that can integrate many aspects of language learning through context-based and responsive interaction. Its unique capacity will be elaborated upon in the following section.

2.3. The use of ChatGPT in foreign language learning

The advent of AI-based technology has generated significant disruptions in education, particularly in language learning, with increased support from ChatGPT (Li et al., 2024). Foreign language instruction is considered a multilayered process that involves cognitive, affective, and social dimensions that require learners to interact in the target language in formal or functional contexts. In this scenario, informally, AI language models, such as ChatGPT, from OpenAI can help facilitate this process of natural language input as context is provided. ChatGPT acts not only as a chatbot, but it can also act as a language production and feedback tool. Overall, as a productive and receptive language tool, ChatGPT has much to offer foreign language learners (Kartal, 2023).

The underlying reason for ChatGPT's effectiveness is the AI algorithms, which personalize language learning and make it learner-centered (Jeon et al., 2023). ChatGPT enables continuous interaction for students because the AI has the capacity to produce contextually appropriate and varied responses to learner input instantly. For students struggling to find a partner to practice speaking, ChatGPT can act as a "real-time" language partner (Leleparry et al., 2023). This creates an environment where learners can produce language without the stress of making mistakes, and helps build confidence in language use. Furthermore, exposure to additional target language is provided through students' written and spoken interactions with ChatGPT, which enhances their vocabulary and language awareness (Meniado, 2023).

ChatGPT has provided significant contributions to language learning through the processes of curriculum creation and evaluation of lesson materials. Yu (2024) summarizes this as follows: Not only is ChatGPT a resource for teachers, but it also significantly eases the process of creating personalized lesson plans, developing materials catered to students' levels,

and assessing student learning outcomes and engagement. Teachers have started to view ChatGPT not just as a resource, but rather as a collaborator in lesson planning. It also enables lesson contextualization based on the curriculum, with its ability to generate rewritten original texts, creating leverage for teachers to offer students extra, contextualized, and varied materials (Rasul et al., 2023).

Still, again, while this has some positives, there are many positives and negatives concerning ChatGPT used by educators and students. As highlighted by Farhi et al (2023), students at a university in the United Arab Emirates have both opportunities and concerns related to ChatGPT. They reported that ChatGPT could be motivating and save time, yet expressed concern about ethical dilemmas, the reliability of information, and academic integrity. Because of that, during examination processes, there is a perception that the use of ChatGPT would lessen students' independent thinking and production. It is recommended that the use of ChatGPT within educational practices be regulated according to specific ethical guidelines, and that these guidelines be understood by both educators and students.

Çobanoğulları (2024) similarly found that while ChatGPT is an effective tool in language learning, the nature of this effectiveness depends on the purpose of use and the pedagogical framework. In other words, when this tool is not integrated consciously, purposefully, and in accordance with pedagogical principles, it can lead to adverse outcomes such as students becoming solely dependent on external feedback and failing to develop critical thinking skills. At this point, teachers' digital pedagogical competencies come into play. It is clear that educators must possess not only technical knowledge but also sufficient competence in ethical, pedagogical, and assessment dimensions in order to use AI-supported tools like ChatGPT effectively.

The systematic review by Balci (2024) is significant in terms of demonstrating the effects of ChatGPT on different skills in the EFL context. It was highlighted in the study that ChatGPT had positive effects, especially in writing and vocabulary skills, and that it also was an enhancer of motivation and provided an interactive environment. Although there was positive evidence and objectives, there were also consequences for students becoming dependent on these technologies, and in particular, in terms of moving away from originality and non-face-to-face interaction. This illustrates the need for a balanced approach to introducing tools like ChatGPT to engage students with technological outcomes while remaining cognitively active.

Su et al. (2024), conversely, evaluate the possibilities raised by ChatGPT within a classroom context, noting that this technology is not simply an "instrumental" device in language teaching, but rather affects a reconfiguration of the learning process. The author notes several features of ChatGPT, including creating texts in various writing styles, directing word choice, ensuring grammatical well-formedness, improving contextual cohesiveness, and giving students production experiences closer to the real world. In this way, ChatGPT allows students to use grammar and provides them the ability to produce texts with communicative functions. This intersects quite well with contemporary approaches focused on task-based language teaching and meaning-focused pedagogy - approaches that are already taking hold in language teaching.

The potentials of ChatGPT not only provide benefits in the learner experience but also affects the digital transformation processes of educational organizations. According to Opara et al. (2023), ChatGPT is also an effective tool in educational management or instructional design. If faculty can create course content in a shorter time, the potential use for analytic purposes in analyzing student performance, and the saved time in expressing evaluative learning outcomes are understood as already valuable benefits of instructors using ChatGPT. Concurrently, with ChatGPT's provision for personalized learning opportunities, it opens the potential for the creation of differentiated teaching methods for students at different levels. Such differentials, especially in crowded class environments, require careful differentiation to make the learning environment more effective and relevant for learning to occur in a practical way.

Another important point is ChatGPT's potential to balance cognitive load in learners through its production capacity (Kavak et al., 2024). Language learners, especially in areas requiring production such as writing and speaking, can sometimes experience mental blockages (Nagy & Townsend, 2012). At this point, ChatGPT helps learners overcome these blocks by providing them with example structures, thematic suggestions, and content ideas. Feng Teng (2024) reported in a systematic review that ChatGPT is used as an initiator tool, particularly in learners' creative writing and content planning processes, and that it enhances their productivity. Thanks to such guidance, students can approach the writing production process with greater confidence, thereby supporting long-term writing autonomy.

Autonomy in foreign language learning is a central concept in contemporary pedagogical approaches (Çakıcı, 2015). ChatGPT is considered one of the technologies that support learner autonomy because it offers students the opportunity to manage their learning

processes, interact directly with language input, and receive help whenever they need it. Especially in learning activities conducted outside the classroom, students consulting ChatGPT to review their written work, practice speaking, or have explanations of linguistic structures they do not understand aligns with the technology's supportive yet guiding nature (Deng & Lin, 2023). In this context, it can be said that ChatGPT contributes not only to the teaching process but also to the understanding of lifelong learning.

In summary, it is evident that ChatGPT has had multidimensional effects on foreign language teaching and initiated a shift in educational paradigms (Dwivedi, 2025). ChatGPT provides a learning process for students while facilitating the planning, implementation, and evaluation of learning for teachers. Students have noted how ChatGPT contributes positively to many skill areas and sub-skills such as writing, speaking, vocabulary, and structural and grammatical accuracy (Raheem et al., 2023). Yet, if we are to positively and sustainably emphasize the impact of ChatGPT on foreign language processing in the long term, we must outline flexible pedagogical frameworks for effective practices and utilize technology as a learning tool. With proper scaffolding, the opportunities presented by ChatGPT can go beyond improving learning outcomes, but also improve learners' attitudes and habits towards learning.

Alongside all of these various effects, ChatGPT plays a disruptively positive role in the process of foreign language teaching through its potential for innovative support in developing speaking skills (Umar, 2024). In particular, ChatGPT provides a risk-free, reproducible environment for oral production, making the possibility for students to practice speaking available in the moment, especially for students that have speaking anxiety when learning a language, as it allows students to build language fluency and self-confidence in ways to communicate language while learning by experience without the pressure of mistakes (Xiao et al., 2024). Additionally, the teacher can use this firm's resources to practice oral pronunciation or deal with classroom activities, interactive dialogues, and formative assessment processes. In this way, ChatGPT becomes a comprehensive and seamless learning partner, providing support through both written and spoken language production, serving as a strong digital assistant that enhances autonomy for students while maintaining human interaction within the foreign language learning process (Mohebi, 2024).

2.3.1 ChatGPT and speaking skills

Speaking skills represent the most tangible measure of language proficiency in foreign language learning and facilitate effective communication (Littlemore & Low, 2006). Enhancing

the speaking skill does not only involve knowledge of vocabulary, or being grammatically accurate, but requires the learner's ability to interact synchronously, to create meaning, and to produce spoken language. Traditionally, students were not given the opportunity to practice speaking, for reasons such as limited class time, limited participation from students, and little or no personalization in practice (Barret & Liu, 2016). In particular, the interactive practice climates provided by AI-based language models such as ChatGPT amount to a viable alternative on many of these fronts (Roumeliotis & Tselikas, 2023).

ChatGPT is a sophisticated AI system that can interact with users in a natural language (Goar et al., 2023), which allows students' writing practice in the target language to be coupled with a spur-of-the-moment, spontaneous production of language. Tools like ChatGPT play an important role in helping learners develop linguistic fluency, entering the practice stage of learning more and learning without any fear in the learning process of making mistakes. Zhai and Wibowo (2023) reported positive results when using chatbots for speech production, noting improvements in their students' ability to construct sentences, express their ideas, and engage in dialogues with one another. These interactions provided support for their linguistic accuracy and elements of communicative competence, such as speed, deftness of movement, and contextualization. The students store specific speech patterns in the written dialogue they have with ChatGPT, and they begin to transfer those patterns from the computer to the real speaking environment (Cardon et al., 2023). Particularly for students who do not sufficiently recognize the structural features of the target language, these text-based interactions create linguistic awareness and affect the production process (Yang et al., 2024).

ChatGPT's quick and contextually appropriate responses to language input shorten students' reaction times and thus support oral fluency (Ray, 2023). The balance between mentally planning and maintaining the production process during speech is developed through such written exercises. At this point, ChatGPT's provision of a progressive structure in dialogue strengthens the student's ability to expand, support, and restructure their production based on feedback (Grassini, 2023). Experimental studies on the subject have shown that written conversation practices with ChatGPT help students construct more accurate and fluent sentences. Synekop et al. (2024) reported in an application conducted with engineering students that those who engaged in regular dialogues with ChatGPT used more grammatically correct expressions and were more fluent in communication. It is stated that such systematic practices also contribute to oral expression performance in the long term.

In addition to fluency, pragmatic competencies like creating meaning and producing suitable responses are also important in speaking skills. The numerous examples of dialogue that ChatGPT can generate in various contexts enable students to identify these pragmatic patterns. The student can identify effective responses based on examples of how to respond in various contexts and apply these methods during the communication process (Kostka & Toncelli, 2023). In this manner, it is observed that Chat GPT provides value for learners' autonomy (Ullah et al., 2025). Specifically, students can practice the language independently, identify areas for improvement, and make progress without teacher direction. Even learners who have not set enough time aside to do speaking practice in a regular classroom are now able to repeat as often and intensely as they want, learning at their own pace, also due to this technology (Bettayeb et al., 2024).

One of the ways ChatGPT contributes to speaking skills is by improving vocabulary (Pratiwi et al., 2024). Students face fewer challenges with internalizing words and using them more often when they see words used in context. The conversational-type dialogues students have with the system produce meaningful content in a way that also reinforces knowledge of vocabulary and meaningful, functional use of words (Liang et al., 2023). While ChatGPT cannot provide direct audio inputs related to more embodied aspects of speaking skills, such as pronunciation, it can write and provide examples with phonetic implications and provide examples of correct stress (Tolstykh & Oshchepkova, 2024). These written and phonetic explanations help students draw attention to phonemes in slightly more conscious ways and, in some cases, when combining the use of their own voice recordings, help them develop awareness (Saifi, 2024). In addition, some studies have shown that text-based exercises, when paired with speaking practice or pronunciation, draw more cognitive processing from ChatGPT and yield more efficacious outcomes.

ChatGPT is used by students and as a practical tool for teachers to facilitate speaking (Ghafar, 2023). Teachers can utilize this technology to create lesson materials in the form of speech, generate examples of dialogues, and deliver individualized feedback. The speaking contexts prepared by the teacher can be made more varied with ChatGPT; these materials afford students greater opportunities to practice on their own time outside of class (Bekou et al., 2024). The adaptive structure of ChatGPT also allows for customized practice opportunities for students at different levels of English speaking proficiency (Jeong et al., 2023). Even inputs that can be directed depending on their proficiency level could provide simple dialogues for

beginning students and more complex discussion examples for more capable students. In this way, each student experiences the content at a level suitable for their development level, which influences both their motivation and their learning efficiency.

The development of speaking abilities is linked not only to language competencies but also to the students' confidence and their willingness to participate (Leong & Ahmadi, 2017). The activities that students engage in with ChatGPT have led to students having more courage to engage with the language without feeling the anxiety of making mistakes and playing a larger role in the language production process. This specific situation, particularly affecting students with low motivation and confidence, influences the frequency with which they engage with the language and positively impacts their performance when speaking in the classroom (Tee et al., 2020). The influences of ChatGPT on speaking abilities go beyond just individual language development; it can also offer benefits in collaborative learning, in that students can use ChatGPT to plan their speaking activities in a group. Such usage enables students to deliver their presentations in a more organized and cohesive manner. Such usage not only increases meaningful participation but also heightens the levels of possible success when performing established or structured speaking tasks (Mai et al., 2024).

ChatGPT's impact on the speaking skills of students of a language is complex and multifaceted. Having students in an environment where they have an authentic, personalized, flexible, and productive environment is essential for furthering their grammatical accuracy and for the development of their fluency, vocabulary, structures, and communicative strategies. In this regard, it is not only an adjunct in teaching language in today's interactive environment but has become an essential component of any interactive or productive student-centered learning experience. All of these interactive experiences substantially increase the WTC levels of students in the target language; the experiences involved with Chat GPT around fluency development allow individuals to become more confident in their use of language, and their communicative action allows them to become more willing, active speakers in real-life contexts as well.

2.3.2. ChatGPT and WTC

WTC is considered an important construct in foreign language education as it relates directly to the likelihood of individuals using the target language in a real communicative context (Cao, 2014). No matter how proficient one is in a language, students' willingness to engage in communication is crucial for the success of their language acquisition process. In this

regard, AI-based technologies, which have specifically progressed in recent years, have the potential to create new opportunities for increasing students' WTC. Sophisticated linguistic models, such as ChatGPT, extend the boundaries of traditional classrooms, providing individuals with a spontaneous, individual, ongoing, and risk-free communication space (Jelodar, 2025).

The natural language interaction environment created by ChatGPT allows students to practice with more freedom in the target language (Abdulhussein et al., 2025). Students may hesitate to communicate in traditional classrooms, particularly if they feel self-conscious about their ability to communicate or are worried about potentially making a mistake in front of their classmates. ChatGPT facilitates students' confidence in language production because they practice free of worry about making mistakes and not feeling pressured (Liu et al., 2024). However, increased confidence in language learning leads quite directly to an increased WTC level. Not to mention that confidence in language learning is one of the fundamental building blocks of willingness to communicate (Oz, 2014). ChatGPT's individualized responses and ongoing feedback help students feel more linguistically confident. Aldosari (2024) studied students using ChatGPT and reported that they felt more confident in using the target language in general and participating in class discussions. This indicated students felt more comfortable with collective communication activities, as well as reducing the single aspect of production, and collectively using ChatGPT. At the same time, individualized feedback helps student understand their own language production processes, which is another excellent form of support for WTC. Jo (2025) supports the claim that students have greater awareness of their strengths and weaknesses in their interactions with ChatGPT due to the feedback it provided them. Through these interactions, students are consciously aware of what they are actually doing when they have conversations with ChatGPT, and, therefore, increasingly act confidently when it comes to communicating.

Decreasing students' foreign language anxiety has a positive impact on WTC (Yasuda & Nabei, 2018). Language anxiety can create a barrier for students to take part in the communication activity. ChatGPT reduces that barrier by providing people with a friendly and non-judgmental communication partner. As a result, students are able to use the language more freely before they make mistakes (Woo et al., 2024). ChatGPT-supported communication opens up students with low levels of self-confidence and high levels of anxiety, resulting in dramatic increases in willingness to communicate.

Strengthening intrinsic motivation is one of the important factors in increasing WTC. Javaid et al. (2023) highlight how students' engagement with ChatGPT maintains their motivation to use the target language. ChatGPT creates flexible and engaging dialogue that promotes learners' development of positive attitudes towards their learning, which in turn increases their willingness to use a language. In particular, gamified conversation scenarios generated by ChatGPT and content that reflects personal interests establish continued motivation. The ChatGPT structure that reflects learner autonomy indirectly strengthens WTC. As noted by Zhang et al. (2025), students who use ChatGPT take more ownership of controlling their learning, targeting areas where they may have deficiencies, and choosing their pace of learning. This sharing of ownership affects students' sense of agency and commitment to using the language. Thus, their willingness to communicate is also heightened.

As distance education and digital communication platforms continue to increase, particularly post-pandemic, the construct of digital WTC has become increasingly relevant. Zhang et al. (2024) show that online dialogues with ChatGPT exhibit students' predisposition to using the target language on digital platforms. Communication practices in virtual spaces create opportunities for participants to respond more easily in real-time and become more active contributors to online classroom discussions. Practicing real-life scenarios makes language production a more natural feel and supports the development of WTC. Li and Zhang (2024) claim that the contextual dialog examples provided by ChatGPT encourage learners to use the target language in real-life communication scenarios and provide valuable opportunities to develop the willingness to use the target language spontaneously. These experiences reinforce the understanding of language as an active, communicative tool rather than a learned body of knowledge, and more radically shape students' attitudes towards the use of language.

The positive influences students experience in their interactions with ChatGPT are emulated in their behaviors of communicating in classroom settings. As seen in a longitudinal study conducted by Al-Murshidi et al. (2024), students who used ChatGPT took the floor more frequently in class discussions and exhibited, on average, more complex and extended expressions. This was interpreted as the technology-supported individual practices of students were positively transferred to genuine collective communicative environments. Moreover, the individualized, fully flexible, interactive learning environment created by ChatGPT supports varying levels of learners' willingness to communicate (WTC) in a second language (L2). An elementary-level learner might communicate by having simple dialogs, while advanced levels

have opportunities to represent their thoughts in more complex discussion scenarios. Accordingly, each learner, with their individual communication experience suitable to their developmental level, will increase their motivation and their willingness to use the language through their engagement (Oxford & Shearin, 1994).

In conclusion, ChatGPT's influence on learners' WTC levels possesses a multifaceted character (Zhi & Wang, 2024), and numerous factors may define this process holistically, such as upper level of individual self-confidence, lower level of anxiety, higher level of motivation, encouragement of the learner's autonomy, and possibilities to practice in real situations. ChatGPT has emerged as technical assistance for language learning and also as a great interaction partner, to facilitate the individual learner's inspiration and desire to communicate (Amin, 2023). In this view, it has an important position at the center of new paths to improve WTC in foreign language education today.

CHAPTER 3

3. METHOD

In this phase you will be informed about the research method of this study. The methodology section will consist of the research model, research group, context, participants, implementation procedures, data collection tools and techniques, data collection, and data analysis.

3.1. Research Design

This study used a mixed-methods research design to study the effectiveness of using an advanced language model to enhance foreign language learning through gamification. This research design included both quantitative and qualitative data collection and analysis methods. Both forms of data collection and methods allowed for a complete understanding of the research problem. The methods used for the research were surveys, semi-structured interviews, and speaking skill tests. The study lasted ten weeks and took place during two phases: a quantitative phase and a qualitative phase.

The quantitative study formed one experimental group and one control group to assess the influences of gamification activities designed by ChatGPT on speaking skills and WTC of elementary-level EFL students. In the study, based on the idea that experimental designs are particularly useful in evaluating questions about the effectiveness and impact of programs, according to Gribbons and Herman (1996, p. 1), an experimental research design was adopted. However, the groups were not randomly assigned; the existing classes were evaluated in their natural state. Therefore, the study has a quasi-experimental nature.

The experimental group consisted of twenty-six students, and the control group consisted of twenty-eight elementary-level students. Before the treatment, a speaking skill test and WTC survey scale were given to both the experimental and control groups to determine their level of speaking skills and WTC.

3.2. Procedure

This study was conducted over ten weeks with university students. The procedure includes: two sessions for the pre-post-test and eight sessions for applying gamification activities. The first week was the pre-test, which analyzed the students' English level. At the beginning of the term, the students were told that the course involved communicative activities

in which they were required to discuss, engage in role-play and drama, do pair and group work, plan a task, and carry it out. The students were also given a pre-test to measure their speaking skills and a survey for WTC before the treatment.

Every two hours a week, the students were given gamification activities created using ChatGPT and based on the topic of that week, which was presented to students as an activity in the course. The topics were selected from the course book, which could include grammar or other speaking activities. It was chosen following the topics in the coursebook. The participants were assigned to two groups: an experimental group engaged in gamified language learning activities with the advanced language model and a control group taught from the course book following the university curriculum.

Table 1 below provides a week-by-week summary of the in-class implementation process in this study. The implementation period lasted a total of ten weeks and was conducted with elementary EFL learners. Each week included ChatGPT-supported gamified activities designed around a specific grammatical structure or communicative goal. These activities aimed to improve students' speaking skills and increase WTC in the target language. Table 1 includes each week's objective, a brief description of the activity implemented, and the main linguistic/communicative skill focused on. Following the table, the practices of each week are described in detail, thus detailing the pedagogical approach and implementation strategies of the process.

Table 1. Summary of in-class implementation

Week	Objective	Activity Description	Key Focus
Week 1	Pre-Test	In the first week, students took a pre-test to assess their English-speaking skills. They were also given a survey to measure their WTC before starting the activities.	Speaking skills and WTC evaluation
Week 2	Frequency Adverbs	Students learned about frequency adverbs. In a “frequency survey” activity, students asked each other questions about daily routines (e.g., “How often do you exercise?”) and recorded the answers, encouraging the use of frequency adverbs in conversation.	Frequency adverbs in daily life
Week 3	Past Tense (Regular and Irregular Verbs)	Students explored inspiring historical figures and events. They identified past-tense verbs from stories and categorized them as regular or irregular. Group presentations focused on the stories, with an emphasis on the use of past-tense verbs.	Regular and irregular verbs in the past tense

Week 4	Present-Time Expressions in the Context of Jobs	Students randomly picked job and time expression cards. They prepared a presentation describing a typical day in their assigned job using the selected time expression. The activity concluded with role-playing various professions.	Present-time expressions in daily routines
Week 5	Present Perfect Tense (Sports Journalist Role-Play)	Students role-played as journalists and athletes. The journalist asked questions using the present perfect tense, focusing on athletes' careers and achievements, while the athletes responded in the first person, using the present perfect tense.	Present perfect tense
Week 6	Future Speculation	Students used their imagination to discuss how various aspects of life (e.g., transportation, education, technology) might change over the next 50 years. Groups took on professional roles and speculated about future developments in these areas.	Future speculation and critical thinking
Week 7	Engaging in Face-to-Face Conversations	A bowl of intriguing questions was introduced. Students took turns picking questions and discussing them with new partners. After the activity, there was a group discussion about what they learned regarding conversation initiation and maintenance.	Conversation initiation and maintenance
Week 8	Real-Life Discussions (Real Estate Role-Play)	Students acted as real estate agents, clients, and city planners. They negotiated and discussed properties based on client preferences. Role-switching allowed students to experience the perspectives of agents, clients, and planners in a real-life scenario.	Negotiation and real-life discussions
Week 9	Travel-Related Conversations (Role-Play)	Students role-played various travel-related situations (e.g., lost luggage, finding a hotel) using scenario cards. The classroom was arranged to simulate different travel environments like airports and tourist centers. They practiced problem-solving.	Travel-related problem-solving conversations
Post-test		Students took a post-test to assess their English-speaking skills. They were also given a survey to measure their WTC before starting the activities.	Speaking skills and WTC evaluation

In the first week, the objective was to talk about frequency adverbs. First, the class was taught some frequency adverbs from the coursebook, and the learners were taught how to use them in daily life activities. In the practice activity, the learners joined in the activity “frequency survey” in which students asked questions about daily activities, such as “How often do you exercise?”. The learners circulated the classroom, asking their classmates' daily routine questions and noting their answers using frequency adverbs. After completing the survey,

students shared interesting findings with the class. This activity encouraged interaction and practice in both asking and answering questions using adverbs of frequency.

In the second week, the students were able to talk about past events with a focus on regular and irregular verbs through the exploration of inspiring historical figures or events. Firstly, the teacher started with a brief discussion about what makes a story or a person inspiring. It could be bravery, innovation, kindness, etc. Following that, the learners were given short biographies and stories. After reading, the learners identified and listed the verbs in the past tense found in the story. They categorized them into regular and irregular verbs. After that, the learners were handed out worksheets with sentences from the stories but with missing verbs. Learners fill in the blanks using the correct form of the regular or irregular verbs in the past tense. In groups, students discussed the stories, focusing on why these stories are inspiring and the actions (expressed through verbs) that made the characters or events memorable. In the end, each group presented their story to the class, emphasizing the past-tense verbs and explaining why they found the story inspiring. This activity was both educational and enriching, as it allowed students to learn about inspiring figures and events while practicing their language skills.

In the third week, the objective was to talk about present-time expressions in the context of various jobs. Job cards that depict different professions, such as doctor, teacher, and engineer, were picked randomly by the learners. Following that, present-time expression cards were given to the learners. Each group had one job card and a time expression card. The group prepared a short presentation describing a typical day in the chosen job using the picked time expression. At the end, the learners had a short role-play. This activity taught the usage of present-time expressions and helped students learn about various jobs, encouraging them to think about different professions and their daily routines.

In the fourth week, the learners practiced the present perfect tense by role-playing as sports journalists and athletes, focusing on athletes' careers and achievements. The teacher brought a list of athletes and some interview questions to the classroom. Each pair picked the athletes randomly, and they had two minutes to search for information about the athletes. One student played the role of an athlete, and the other was a journalist. The journalist student asked questions that utilized the present perfect tense. The athlete students answered the questions in the first person, using the present perfect tense. After a set amount of time, students switched

roles. This activity not only taught the present perfect tense but also encouraged creativity, speaking skills, and learning about different sports and athletes.

In the fifth week, the learners were encouraged to use their imagination and critical thinking skills to envision and discuss how various aspects of life might change over the next 50 years. The teacher started with a quick introduction and a brainstorming session with the learners about how technology, society, and the environment have changed over the past 50 years. Secondly, the class was divided into eight groups, and each group was assigned a specific aspect of future life to focus on (e.g., transportation, education, entertainment, environment, technology, health, work, and home life). The learners discussed and imagined how it might change in 50 years. After that, each student in the group picked up a role (e.g., a future scientist, a teacher, a digital artist, and an environmentalist) relevant to their topic. The learners spoke from this perspective.

In the sixth week, the learners were encouraged to engage in face-to-face conversations, practicing how to initiate and maintain engaging discussions. A bowl and slips of paper with pre-written fun and intriguing questions were brought to the class. Students took turns to pick up a question from the bowl, and then they found a partner they had not spoken with yet. The questions are about hobbies, favorite movie, and traveling. After that, the activity concluded with a group discussion about their experiences and what they learned about starting conversations. These activities were designed to be engaging and interactive, helping students to practice starting conversations in a light-hearted and meaningful way.

In the seventh week, the objective was to experience real-life discussions. The learners engaged in a role-play where they acted as real estate agents and clients negotiating and discussing features of their ideal living places or neighborhoods. Firstly, the classroom is arranged to stimulate different 'property' stations. Each student drew a role card. There were real estate agents, clients, and a few inspectors or city planners. Agents received brief descriptions of various properties (real or imaginary), including details about the neighborhood, amenities, and unique features. Clients had a list of what they were looking for in a property or neighborhood. Agents presented their properties to the clients, tailoring their pitch to the clients' wishes. Clients asked questions and expressed their preferences. Inspectors or city planners added challenges or additional information about the neighborhoods, encouraging problem-solving and further discussion. After a set time, students changed roles to experience different perspectives.

In the last week, the learners were able to talk about travel information and manage unexpected travel-related challenges through role-play. Firstly, scenario cards detailing different travel situations and props to stimulate travel environments, like maps, travel brochures, and tickets, were brought to the class. Then, the classroom was arranged to represent different travel settings such as a train station, a tourist information center, and an airport. Students picked up cards that assigned them roles (e.g., traveler, ticket officer, tourist information assistant, resident) and scenarios (e.g., lost luggage, finding a hotel, asking for directions). Students interacted based on their roles and scenarios. For instance, a traveler might need to ask for directions, while a resident provides information. Some scenarios included specific problems that needed to be solved, encouraging students to use their language skills creatively. After a set time, students switched roles to experience different aspects of travel-related conversations.

At the end of the study, students were given a speaking skill test as a post-test to measure learners' language outcome and a survey for WTC, which is the psychological aspect of language learning. Interview questions were conducted with the participants to support the data of the study. Here is a summary of weekly activities:

In the qualitative part, although there are different sampling methods, the general aim is to reach examples that will allow for the best possible explanation of the researched subject and contribute most effectively to solving the research problem (Baltacı, 2018). In this respect, semi-structured interviews were conducted with 15 students selected from the experimental group to gain deeper insights into their experiences and perceptions of the gamified language learning approach. The interviews were transcribed by the researcher using an AI tool.

3.3. Participants

The research group for this study is comprised of sixty university students who were chosen at random and are between the ages of 18 and 20. These students are currently enrolled in the English preparatory education program at Necmettin Erbakan University in Konya, Türkiye, during the academic year 2023-2024. Students who are enrolled in English preparatory education typically choose to major in either Aviation Management or Political Science and Public Administration. Reading and writing, speaking and listening, and grammar are the subjects covered in the English preparatory education that these students are required to take. The process began with the teaching of these abilities through the use of a single book, and it continued with the addition of skill books in subsequent processes.

The students received instruction in integrated classrooms for a duration of one month before being assigned to English preparatory programs. After the completion of the first month, a placement exam was conducted to determine the students' proficiency levels. Based on their performance, they were assigned to classes that matched their abilities. They then proceeded to receive instruction in their respective classes until the following placement test. The study commenced after the placement test was administered to the students, and the groups and students were chosen at random. The initial proficiency level of the chosen groups is A2, which corresponds to an elementary level. The study started with 60 people and ended with 54 people after six students dropped out of school. Of the 54 participants, 26 were in the control group and the rest were in the experimental group. Of the randomly selected students, 21 were male and 33 were female.

In order to support the quantitative data, a total of 15 students, eight of whom were male and the rest female, were randomly selected from the interview experimental group, which was one of the qualitative data collection tools. The only criterion taken into consideration while selecting these students was that the distribution of male and female students should be approximately equal. The selection of the students to be interviewed did not take into account their department or English level. At the end of the study, both the experimental group and the control group students completed the B1+ level (pre-intermediate) by the end of the first semester.

3.4. Data Collection

This study utilized both qualitative and quantitative data collection tools. The quantitative data was collected through questionnaires on WTC, pre-tests, and post-tests on speaking skills. In order to increase accessibility in the research, data collection tools were organized on the web (Google Forms) and collected online. As for the qualitative part, semi-structured interviews were utilized. Here, the interview type chosen is semi-structured, in which the interviewees (in this case, students) were asked open-ended questions at the end of the one-term research application procedure. Within this process, ten pre-prepared guiding questions were directed to the students following the effectiveness of gamification activities, and the researcher transcribed their responses.

The scale developed by McCroskey & Baer (1985) was utilized to measure WTC. The scale consists of 12 items, each with a 3-point Likert type. It was prepared as “1- I never communicate”, “2- I sometimes communicate”, “3- I always communicate”. There is no reverse

item in the scale. Cronbach's alpha coefficients were found to be 0.92 for the whole scale. In general, the larger the number of receivers and the more distant the relationship of the individual with the receiver(s), the less willing the individual is to communicate.

To measure speaking skills, the Cambridge Assessment English – KET (Key English Test) was applied before and after the treatment to determine the effects of using gamification in the development of speaking skills.

3.5. Data Analysis

Quantitative data, which was gathered through WTC and Key English Test, was analyzed by using the statistical analysis software called Statistical Package for Social Sciences (SPSS). The WTC questionnaire was applied before and after the treatment to determine the effects of using gamification in the development of WTC. Similar approaches have been effectively applied in language learning studies, where pre- and post-test designs facilitate the measurement of intervention impacts on student engagement and communication skills (Shafiee Rad, 2024). The KET (Key English Test) speaking section includes two parts, each with two phases. The speaking rubric is divided into four indicators (Grammar and vocabulary, Discourse management, Pronunciation, and Interactive communication) that evaluate each one on a scale of 5 points for the students' speaking proficiency. In that way, the numerical results allowed us to analyze the students' speaking progress obtained in the pre-test and post-test with the interventions. Similar rubrics in language testing ensure that evaluations capture diverse skill areas, enabling targeted analysis of student progress across multiple language domains.

In this study, a systematic approach was adopted in the analysis of student interviews, and the content analysis method was used. Conducted in accordance with the best practices recommended in educational research, the content analysis aimed to obtain in-depth information about participants' perceptions and learning processes (Deterding et al., 2011). Initially, all interviews were documented with audio recordings, and then these recordings were transcribed in full. The obtained transcripts were meticulously examined, and meaningful expressions and key sentences were identified. The analysis process was guided by predefined themes: Fun and Permanent Learning, Active Participation, AI-Supported Learning, Permanent and Motivating Learning, Positive Impact of Competition, Challenges Encountered, Gamification and Balanced Use of Traditional Methods, and Recommendations for the Future. The coding process involved categorizing student responses according to these themes and structuring subcodes under each theme.

During the analysis process, it was observed that in the theme of "Fun and Lasting Learning," activities supported by games and visuals made learning more enjoyable and lasting. In the theme of "Active Participation," it has been determined that gamification increases attention span and strengthens students' participation in the class. In the theme of "AI-Supported Learning," it has been observed that AI tools accelerate learning, but their excessive ease of use may lead to laziness. Within the scope of "Permanent and Motivating Learning," it has been found that interactive learning processes involving interaction with friends enhance the retention of knowledge. In the theme of "The Positive Impact of Competition," it has been determined that optimal levels of competition and group work support motivation. In the theme of "Challenges Encountered," it has been determined that difficulties such as vocabulary gaps and technical issues have turned into development opportunities in the learning process. The theme of "Balanced Use of Gamification and Traditional Methods" emphasized that blending gamification with traditional methods is a more effective teaching approach. Finally, in the theme "Suggestions for the Future," student opinions were recorded, indicating that gamification should also be applied in different subjects and content areas. After the coding and thematic analysis were completed, the findings were discussed in relation to relevant educational theories and previous research (Vathanalaotha, 2022). For each theme, student statements were included, thereby comprehensively demonstrating how gamification-supported learning contributes to student motivation, active participation, and learning retention. The study concludes with recommendations for educators and institutions on integrating various gamification elements into teaching strategies to enhance student motivation and learning outcomes. Additionally, it has been emphasized that the long-term effects of gamification and its applications in different learning contexts need to be further researched.

The use of both qualitative and quantitative data in research contributes to more comprehensive and reliable results. Qualitative data provides in-depth insights into students' personal experiences, thoughts, and feelings, and helps us to understand in detail the motivations and perceptions of participants through interviews and open-ended questions. Quantitative data, in turn, provides generalizable results on a broad sample and measures students' performance and the impact of specific variables using methods such as surveys and test scores. The combination of both qualitative and quantitative data increases the reliability and validity of the findings, as comparing different data sources strengthens the accuracy and consistency of the results. Moreover, these methods help us identify possible contradictions and inconsistencies. The mixed method approach allows research to be studied both extensively and

in-depth, which allows us to develop a more holistic understanding of a particular topic from different angles (Curry et al., 2009). While quantitative data answers questions like "what" and "how much", qualitative data responds to different research questions by focusing on questions such as "how" or "why". The combination of both qualitative and quantitative findings enables decision-makers to make more comprehensive and evidence-based decisions, which contributes to the more effective development of education policies and practices. In addition, the combined method approach transcends the limitations of research based on a single data type, providing richer and more diverse data sets, which enables deeper analyses and richer findings to be obtained.

In conclusion, combining qualitative and quantitative data offers a more holistic understanding of student experiences and educational outcomes, which can aid in developing effective teaching strategies and policies. The integration of both data types has been shown to produce well-rounded insights, supporting the development of richer, evidence-based educational interventions (Golonka et al., 2014).

CHAPTER 4

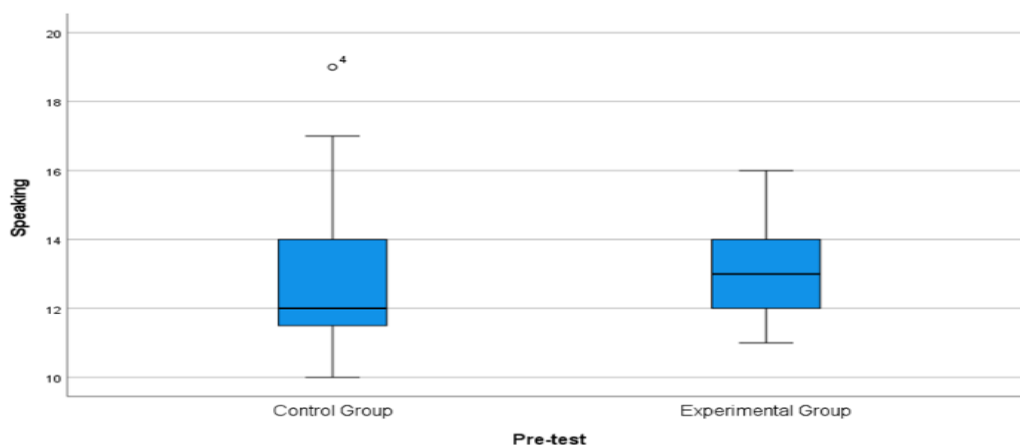
4. FINDINGS

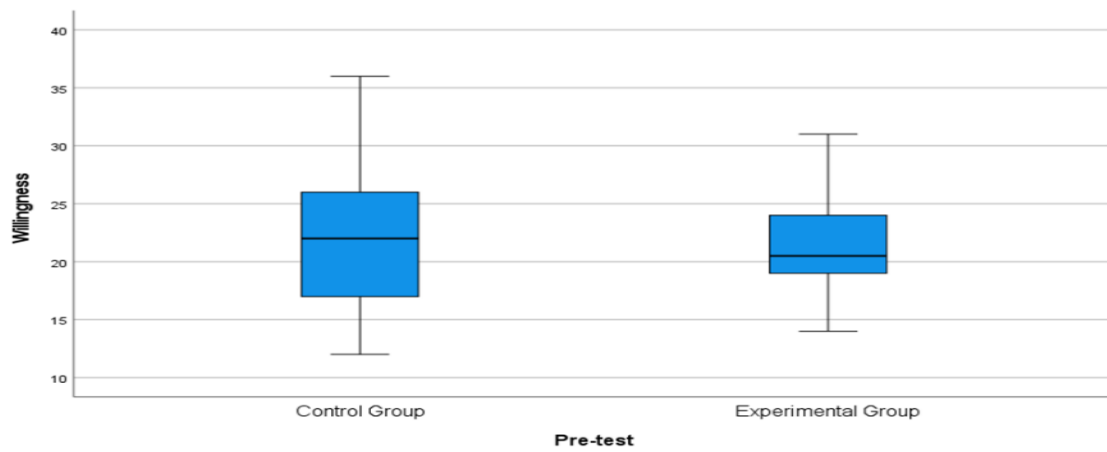
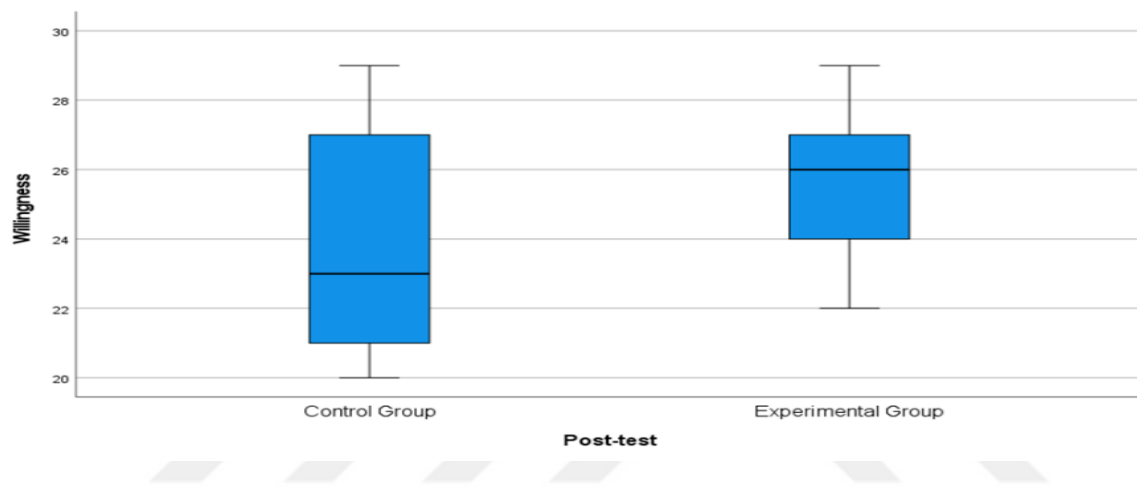
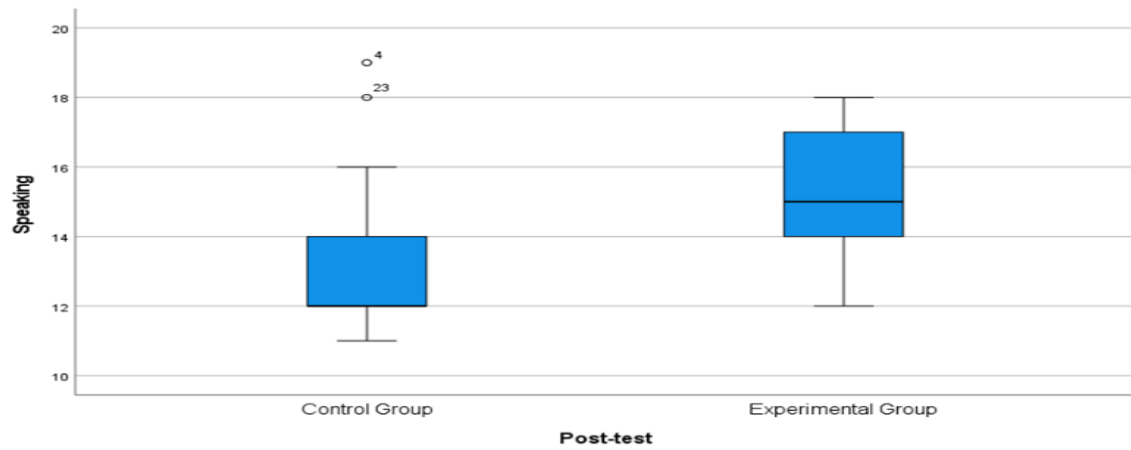
Next, we provide a thorough examination of both quantitative and qualitative data collected during our study. Quantitative results indicate various significant and statistically plausible trends and correlations validating our initial hypotheses with clarity in numerical terms about the issues involved. Themes that result from detailed interviews and analysis bring to light how participants related to and perceived the subject of the action, thus adding depth of information over and above the quantitative results.

4.1. Preliminary Analysis

After the data collected for the research was transferred to the IBM SPSS 26 program, the first step in preparing the data for analysis was to check for reverse items on the scale used. There are no reverse items in the examined Readiness and Speaking Scales. It was checked whether there was any missing data, and no missing values were found. The reliability score of the scale used was calculated based on the data obtained from the application carried out within the scope of the research. The Cronbach's alpha value of the Willingness Scale was calculated as 0.89 in this study. After checking the test assumptions, it was found that parametric and non-parametric tests could be used. The significance of the difference between the pre-test and post-test scores of the experimental and control group students was calculated using the paired t-test and the Wilcoxon test, while the significance of the differences between the pre-test and post-test scores of the experimental and control groups was calculated using the independent samples t-test and the Mann-Whitney U test. Boxplots are shown in Figure 1.

Figure 1.





4.2. Quantitative Results

In this section, we provide the frequency descriptive values for the characteristics of both treatment and comparison groups, which are then followed by analyses of the pre-tests and post-tests scores for both WTC and Speaking scales made by the students in the treatment group. The frequency analysis suggested that the treatment and comparison groups were similarly matched in demographic characteristics and language characteristics, suggesting that comparisons were valid and meaningful. The comparisons of the pre-tests and post-tests showed the treatment group made statistically significant gains both in WTC and speaking scale standards, suggesting the gamified activities created by the advanced model were effective in helping students improve their skills. Furthermore, when analyzing the differences between the pre- and post-tests of the treatment group compared to the comparison group, the treatment group had almost double the differences, which supported our conclusion that incorporating gamified learning activities into a course significantly improved students' WTC and speaking proficiency over conventional course delivery.

4.2.1. Frequency Values Related to the Characteristics of the Experimental and Control Groups

Frequency and percentage values according to the characteristics of the experimental group are given in Table 2.

Table 4.2 Frequency and Percentage Values According to Sociodemographic Characteristics of the Experimental Group

		Frequency (N)	Percentage (%)
Gender	Male	11	%42
	Female	15	%58
	Total	26	%100
Age	18	5	%19
	19	11	%43
	20	5	%19
	21	5	%19
	Total	26	%100

When Table 1 regarding the sociodemographic characteristics of the experimental group participating in the research is examined, the number of male participants is 11 (42%), and the number of female participants is 15 (58%). Additionally, the number of 18-year-old participants is 5 (19%), the number of 19-year-old participants is 11 (43%), the number of 20-year-old participants is 5 (19%), and the number of 21-year-old participants is 5 (19%).

Frequency and percentage values according to the characteristics of the control group are given in Table 2.

Table 3. Frequency and Percentage Values According to Sociodemographic Characteristics of the Control Group

		Frequency (N)	Percentage (%)
Gender	Male	10	%35
	Female	18	%65
	Total	28	100
Age	18	5	%17
	19	8	%28
	20	11	%38
	21	3	%10
	24	1	%7
	Total	28	%100

When Table 2 regarding the sociodemographic characteristics of the control group participating in the study is examined, the number of male participants is 10 (35%) and the number of female participants is 18 (65%). Additionally, the number of 18-year-old participants is 5 (17%), the number of 19-year-old participants is 8 (28%), the number of 20-year-old participants is 11 (38%), the number of 21-year-old participants is 3 (10%) and finally the number of 24-year-old participants is 1 (1%). 7).

4.2.2. Comparison Results of the Pre-test and Post-test Scores of the Experimental Group Students from the WTC and Speaking Scale

WTC

In order to check whether the t-test can be used to test whether the difference between WTC pre-test and post-test scores of the experimental group students is significant, the test assumptions were examined. First, normality and the presence of extreme values were checked. When the boxplots were examined, it was seen that there were no outliers in the dataset. According to the Shapiro-Wilk test results, the scores of the experimental group students were normally distributed ($p > .05$). When the histogram graph was examined, it was observed that the group was distributed normally. Therefore, the data was used as is. A comparison of students' pre-test and post-test scores from the WTC scale is shown in Table 3.

Table 4. Comparison of Pre-test and Post-test Scores of Experimental Group Students from WTC Scale with Paired Groups t-test

		N	$\bar{X}$	ss	Std. Error	t	p	Cohen's d
WTC	Pre-test	26	21,19	3,94	,771	-7,597	,000	1,49
	Post-test	26	25,62	2,10	,412			

According to the results of the Paired Groups t-test, which was conducted to determine whether the difference between the WTC pre-test and post-test scores of the experimental group was significant, the difference between the means was found to be significant $t(25) = -7.597$, $p < .05$. It has been observed that teaching AI as a teaching strategy significantly increases students' WTC levels. As a result of the analysis, the effect size was calculated as $d = 1.49$. This value indicates that the effect size of the difference between the pre-test and post-test scores of the experimental group students from the WTC Scale is at a strong level.

Speaking

In order to check whether the t-test can be used to test whether the difference between the Speaking pre-test and post-test scores of the experimental group students is significant, the test assumptions were examined. First, normality and the presence of extreme values were checked. When the boxplots were examined, it was seen that there were no outliers in the dataset. When the histogram was examined, it was observed that the group was normally distributed. Therefore, the data was used as is. The comparison of the students' pre-test and post-test scores from the Speaking scale is shown in Table 4.

Table 5. Comparison of the Pre-test and Post-test Scores of the Experimental Group Students from the Speaking Scale with the Paired Groups t-test

		N	$\bar{X}$	ss	Std. Error	t	p	Cohen's d
Speaking	Pre-test	26	13,15	1,46	,287	-11,400	,000	2,24
	Post-test	26	15,35	1,67	,333			

According to the results of the Paired Groups t-test, which was conducted to determine whether the difference between the Speaking pre-test and post-test scores of the experimental group was significant, the difference between the averages was found to be significant $t(25) = -11.400$, $p < .05$. It has been observed that AI teaching, as a teaching strategy, significantly increases students' Speaking levels. As a result of the analysis, the effect size was calculated as

$d = 2.24$. This value indicates that the effect size of the difference between the pretest and post-test scores of the experimental group students on the Speaking scale is strong.

4.2.3. Comparison Results of the Pre-test and Post-test Scores of the Experimental Group Students from the WTC and Speaking Scale

WTC

A paired Samples t-test was used to test whether the difference between the pre-test and post-test scores of the control group students from the WTC scale was significant. In order to test whether the t-test can be used, the test assumptions were checked. According to the results of the Shapiro-Wilk test performed to test normality (normality of distribution), the scores showed a normal distribution ($p > .05$). Boxplots were examined to check whether extreme values existed, and it was seen that there were no extreme values in the dataset. Therefore, the data was used as is. The comparison of the pre-test and post-test scores of the control group students from the WTC scale is shown in Table 5.

Table 6. Comparison of Pre-test and Post-test Scores of Control Group Students from WTC Scale with Paired Groups t-test

		N	$\bar{X}$	ss	Std. Error	t	p	Cohen's d
WTC	Pre-test	28	22,25	6,29	1,189	-2,542	,017	0,48
	Post-test	28	24,07	3,03	,573			

According to the results of the Paired Groups t-test, which was conducted to determine whether the difference between WTC pre-test and post-test scores of the control group was significant, the difference between the means was found to be significant $t(27) = -2.542$, $p < .05$. As a teaching strategy, regular instruction has been shown to increase students' WTC levels significantly. As a result of the analysis, the effect size was calculated as $d = 0.48$. This value indicates that the effect size of the difference between the pre-test and post-test scores of the control group students from the WTC scale is at a medium level.

Speaking

In order to check whether the t-test can be used to test whether the difference between the Speaking pre-test and post-test scores of the control group students is significant, the test

assumptions were examined. First, normality and the presence of extreme values were checked. When the boxplots were examined, it was seen that there were no outliers in the dataset. According to the Shapiro-Wilk test results, the scores were not normally distributed ($p < .05$). When the histogram was examined, it was observed that the group was not distributed normally. Therefore, the Wilcoxon test, which is the nonparametric equivalent of the t-test, was used. The comparison of their pre-test and post-test scores from the Speaking scale is given in Table 6.

Table 7. Comparison of the Pre-test and Post-test Mean Scores of the Control Group Students on the Speaking Scale with the Wilcoxon Test

Post-test-Pre-test	N	Rank Average	Ranking Total	z	p
Negative Rank	0	,00	,00	-2,236	0,025
Positive Rank	5	3,00	15,00		
Equal	23				

According to the results of the Wilcoxon test, which was conducted to determine whether the difference between the Speaking pre-test and post-test scores of the control group was significant, the difference between the means was found to be significant ($z = -2.236$, $p < .05$). As a teaching strategy, regular instruction has been shown to increase students' Speaking levels significantly.

4.2.4. Findings Regarding the Comparison of the Differences Between the Pre-test and Post-test Scores of the Experimental and Control Group Students from the WTC and Speaking Scales

WTC

An Independent Samples t-test was used to test whether the difference between the pre-test scores of the students in the experimental and control groups from the WTC scale was significant. In order to test whether the t-test can be used, the test assumptions were checked. According to the results of the Shapiro-Wilk test performed to test normality (normality of distribution), the scores showed a normal distribution ($p > .05$). Boxplots were examined to check whether extreme values existed, and it was seen that there were no extreme values in the dataset. Therefore, the data was used as is. The comparison of the students' pre-test scores from the WTC scale is shown in Table 7.

Table 8. Comparison of Pre-test Scores of Experimental and Control Group Students from WTC Scale with Independent Samples t-test

		N	$\bar{X}$	ss	Std. Error	t	p	Cohen's d
WTC	Experimental	26	21,19	3,94	1,189	0,746	0,460	0,2
	Control	28	22,25	6,29	0,773			

An Independent Samples t-test was conducted to compare the pre-test scores of the experimental and control group students from the WTC scale. Since Levene's test of equal variances gives a significant p-value, homogeneity of variances is not an issue. Therefore, the option without the equal variance assumption was taken into consideration. According to the results of the independent samples t-test, the students' WTC levels do not show a significant difference between the experimental and control groups. $t(45,792) = 0.746$, $p > .05$. When the group data is examined, the average WTC level of the experimental group students is 21.19 ($n = 26$; $SD = 3.94$), while the average of the control group students is 22.25 ($n = 28$; $SD = 6.29$). The change between them is not significant. As a result of the analysis, the effect size was calculated as $d = 0.2$. This value indicates that the effect size of the difference between the pre-test scores of the control and experimental group students from the WTC scale is low.

An Independent Samples t-test was used to test whether the difference between the post-test scores of the students in the experimental and control groups from the WTC scale was significant. In order to test whether the t-test can be used, the test assumptions were checked. According to the results of the Shapiro-Wilk test performed to test normality (normality of distribution), the scores showed a normal distribution ($p > .05$). Boxplots were examined to check whether extreme values existed, and it was seen that there were no extreme values in the dataset. Therefore, the data was used as is. The comparison of the students' post-test scores from the WTC scale is shown in Table 8.

Table 9. Comparison of Post-test Scores of Experimental and Control Group Students from WTC Scale with Independent Samples t-test

		N	$\bar{X}$	ss	Std. Error	t	p	Cohen's d
WTC	Experimental	26	25,62	2,099	0,412	-2,189	0,03	0,59
	Control	28	24,07	3,030	0,573			

An independent samples t-test was conducted to compare the post-test scores of the experimental and control group students from the WTC scale. Since Levene's test of equal

variances gives a significant p-value, homogeneity of variances is not an issue. Therefore, the option without the equal variance assumption was taken into consideration. According to the independent samples t-test results, the students' WTC levels show a significant difference in favor of the experimental group compared to the control group. $T(48.214) = -2.189$, $p < .05$. When the group data is examined, the average of the WTC levels of the experimental group students is 25.62 ($n = 26$; $SD = 2.099$), while the average of the control group students is 24.07 ($n = 28$; $SD = 3.030$) and the change between these averages is 25.62 ($n = 26$; $SD = 2.099$). It is significant in its favor. As a result of the analysis, the effect size was calculated as $d = 0.59$. This value indicates that the effect size of the difference between the post-test scores of the control and experimental group students from the WTC scale is at a medium level.

Speaking

Test assumptions were checked to determine whether the independent samples t-test could be used to determine whether the difference between the pre-test scores of the students in the experimental and control groups on the Speaking scale was significant. According to the results of the Shapiro-Wilk test performed to test normality (normality of distribution), the scores did not show a normal distribution ($p < .05$). When the histogram graph was examined, it was observed that the group was not distributed normally. Therefore, the Mann-Whitney U test, which is the nonparametric equivalent of the t-test, was used. The comparison of the students' pre-test scores from the Speaking scale is shown in Table 9.

Table 10. Comparison of the Pre-test Scores of the Experimental and Control Group Students from the Speaking Scale with the Mann-Whitney U test

		N	Rank Average	Ranking Total	U	p
Speaking	Experimental	26	29,87	776,5	302,5	0,273
	Control	28	25,30	708,5		

According to the results of the Mann-Whitney U test applied to compare the pre-test scores of the experimental and control group students on the Speaking scale, the pre-test scores of the students' Speaking levels do not show a significant difference between the experimental and control groups. $U=302.5$, $p > .05$.

Test assumptions were checked to test whether the independent samples t-test could be used to test whether the difference between the post-test scores of the students in the experimental and control groups on the Speaking scale was significant. According to the results

of the Shapiro-Wilk test performed to test normality (normality of distribution), the scores did not show a normal distribution ($p < .05$). When the histogram graph was examined, it was observed that the group was not distributed normally. Therefore, the Mann-Whitney U test, which is the nonparametric equivalent of the t-test, was used. The comparison of the students' post-test scores from the Speaking scale is shown in Table 10.

Table 11. Comparison of the Post-test Scores of the Experimental and Control Group Students from the Speaking Scale with the Mann-Whitney U test

		N	Rank Average	Ranking Total	U	p
Speaking	Experimental	26	36,54	950,0	129,0	0,00
	Control	28	19,11	535,0		

Results of the Mann-Whitney U test used to compare the post-test scores of students from both the experimental and control groups on the Speaking scale show a significant difference between students' speaking levels from the experimental and control groups. $U=129.0$, $p < .05$.

4.3. Qualitative Results

In this study, the qualitative analysis to explore students' perceptions of gamified foreign language learning activities in depth was framed in terms of the views provided by 15 students. The qualitative data analysis process was broadly based on content analysis. Content analysis involves the coding and categorization of specific terms, ideas, and statements in the data according to a systematic procedure and then applying analyses to the terms, ideas or concepts according to the alternative processes of frequency or density (Schwartz & Ungar, 2015). Content analysis adds structure to qualitative data, allowing omissions or emphasis to be documented, and allows for understanding how often certain concepts occur. In this manner, an indication can be made about general patterns from the data. The content analysis process in this study aimed to present students' perceptions of gamified foreign language learning activities and student experiences of those activities, on both a level of surface patterns and critical meaning. Content analysis identified high incidences of concepts, followed by thematic analysis to examine relationships between concepts, and examine critical meaning in the learning process. Hence, a rich and multi-dimensional data analysis grounded in both general trends and individual variations was achieved.

This section provides a thematic summary of the content analysis conducted in line with the qualitative data obtained from the student interviews. The content analysis process was conducted by systematically analyzing the semi-structured interviews with the students. The data were coded according to similar units of meaning, and themes were created under these codes. Table 12 shows the themes, codes, and explanations. Following Table 12, each theme is discussed in detail and supported with examples from student opinions.

Table 12. Summary of content analysis

	Themes	Codes	Explanation
1	Fun and permanent learning	Fun and motivation, permanent learning,	Activities supported by games and visuals made learning more permanent and fun.
2	Active participation	Increased attention span, gamification-based learning	Gamification increased students' active participation and focus.
3	AI-assisted learning	Learning accelerated, instant feedback, and misuse of AI tools	AI tools facilitated learning, but excessive ease created the risk of laziness.
4	Permanent and motivating learning	Interaction with friends, interactive learning	Interactive learning processes increased the retention of information.
5	The positive effect of competition	Competition and ambition, optimum level	A sense of competition and group work increased motivation to learn.
6	Challenges	Lack of vocabulary, technical problems	Students experienced technical and language difficulties, which turned them into improvement opportunities.
7	Balanced use of gamification and traditional	Mixed teaching method, avoidance of monotony	The use of gamification together with traditional methods was found to be more effective.
8	Future suggestions	Diversity of activities	Gamification should be applied to different courses

First of all, the fun and permanent learning effect of gamified activities on students is noteworthy. Most of the opinions emphasized that such activities were more engaging

compared to traditional teaching methods. While S1's statement, *"I still remember the song I learned in primary school,"* draws attention to the impact of these methods on long-term learning, participants such as S2 and S3 stated that fun content contributed to both conceptual learning and linguistic skills. These statements indicate that multiple interactions that support affective and cognitive aspects of learning increase retention.

Related to this, the positive effect of competition also became a triggering factor for students' interest in learning. Many participants stated that elements such as tasks and competitions add excitement to the learning process and encourage students' active participation. S4's comment, *"When the game comes in, the competition comes in and this facilitates learning,"* clearly reveals the motivational nature of game-based structures.

Another striking theme is increased students' active participation and attention levels. The participants described themselves as individuals with more say and were more involved in the process, thanks to gamification, rather than being passive in traditional lessons. While S5's statement *"When it is traditional, you get bored, you do not perceive much"* reveals that traditional methods lead to a lack of motivation, S6's statement *"Since we were all given tasks, everyone became active"* shows how structured game environments support equal participation.

Another important study finding is the impact of AI-based language learning tools. The students evaluated technologies such as ChatGPT and Duolingo as both teaching and practicing tools. S7 emphasized the support offered by these technologies by saying, *"Artificial intelligence makes things easier; we can get help while talking or asking questions"*. However, some students also stated that the excessive convenience of these tools could be detrimental to learning. S8 drew attention to this situation and said, *"Artificial intelligence makes learning easier, but it may make you lazy because it is too easy"*.

Permanence of learning is another frequently mentioned theme. The students especially emphasized the reinforcing effect of audiovisual content, songs, and interactive tasks. S9's statement, *"I forget when I study from the book, but what I learn with the game is permanent,"* clearly shows that while traditional methods have limitations, game-based content contributes to long-term recall. In addition, gamification was found to be effective not only in terms of cognitive gains but also in terms of socio-emotional development. S10's emphasis on *"You learn even if you do not want to"* shows the contribution of spontaneous interactions to learning.

However, some of the students also reported difficulties. The most common problems included a lack of vocabulary, technical problems, and in-app errors. S14 and S8's comments on vocabulary also show that such activities provide an opportunity for development. S14 said, *"I did not know the meaning of some words, I had difficulty in constructing sentences"*; S8 said, *"My vocabulary was very narrow, I had difficulties, but then I learned the unknown vocabulary, so activities also enhance my vocabulary knowledge."* and stated that these difficulties also offered an opportunity for development. It is understood that difficulties are experienced as contributing rather than hindering the learning process.

Most of the participants argued that gamification should be presented in a balanced way with traditional methods. S15's statement *"The traditional system is an established structure, gamification is like its ketchup and mayonnaise"* provides a humorous but meaningful suggestion that these two approaches can complement each other. These statements indicate that hybrid learning models can offer more appropriate solutions to student needs.

Students made various suggestions for future applications. Among these, increasing the number of activities, adapting the content according to the level, providing instant feedback, and strengthening the use of visual materials stand out. S7's suggestion for VR technologies shows that students have creative and innovative expectations for the learning process. While S7 stated, *"It would be better if there were more activities and instant feedback,"* S15 said, *"It would be more realistic if there were technologies such as VR glasses"*. S12 said, *"Visualization should be increased. Visual support increases memorability,"* and drew attention to the quality of the material.

Finally, students believe that gamification is applicable not only in foreign language learning but also in other subjects and skill areas. Ideas such as role-playing in history class and solving puzzles in mathematics show that students have the potential to integrate gamification into different contexts. Overall, these findings suggest that gamification is a motivational tool and a structured pedagogical approach that supports cognitive, affective, and social development. Students' opinions highlight the need for a stronger and more widespread use of gamified learning in course design and to restructure instructional processes to be student-centered and interaction-oriented.

4.3.1. Conclusion

In this study, the effects of gamified foreign language learning activities on students were examined based on qualitative data analysis. The findings show that gamification makes significant contributions to students' learning processes at both cognitive and affective levels. In particular, elements such as fun, increased motivation, and active participation kept students' interest in the lesson alive and helped learning to become more permanent.

Unlike traditional methods, students stated that they retained information in their memory for a more extended period of time thanks to game-based activities. Tools such as educational songs, visuals, and interactive tasks transformed learning from a mere process of information transfer into a social experience. In addition, the element of competition was also found to have a positive effect on learning. Competitions and task-based activities allowed students to participate more effectively at both individual and group levels.

Another important finding of the study is the integration of digital tools and AI-supported applications into the learning process. Tools such as ChatGPT and Duolingo were positively perceived by students as accelerating and supporting learning. However, some students expressed concerns that these technologies could lead to superficiality in the learning process by providing excessive convenience.

This shows that digital technologies should be used consciously and in a balanced way. In addition to the advantages offered by gamification, students also encountered some difficulties. Although problems such as lack of vocabulary, technical problems, and application errors interrupted the learning process from time to time, these difficulties were generally considered as development opportunities by the students. This finding is important in terms of showing the active and positive attitude that students have towards learning.

As a result, students stated that gamification is not a sufficient method on its own and that it can be more effective when combined with traditional teaching methods in a balanced way. This shows that hybrid learning models can create motivating and sustainable learning environments more suitable for student needs.

CHAPTER 5

5. DISCUSSION, CONCLUSION, AND SUGGESTIONS

In this section of the study, we analyze the results of the research about the research questions and provide suggestions for future research. The analysis confirms several expected outcomes and unveils new insights that could influence further studies in the field. Additionally, we identify several limitations within our study, which open the door for more targeted investigations to refine and expand upon our findings.

5.1. Discussion

This section discusses the results of this study, which was carried out to offer a novel solution model for the issue of a lack of speaking in the English language education system in Türkiye, and lack of motivation in the English language classroom, and to evaluate how they relate to the field of research literature and to determine the contribution of results. The study lasted for ten weeks, took place in the context of 54 elementary-level preparatory school students at Necmettin Erbakan University, and investigated how gamification of advanced language models supports the discovery of a foreign language using a mixed methods approach. In the study, changes in learner performance were monitored by means of quantitative data, and qualitative data were also collected to gain in-depth information about students' lived experiences and perceptions. The results were consistent with earlier studies and extend current knowledge by suggesting how ChatGPT activities improve engagement and academic performance for learners. This section includes a synthesis of both quantitative and qualitative findings in the light of the relevant literature, and information on how the study's results confirm and relate to the previous studies is provided to suggest appropriate implications. The following section presents the quantitative findings.

There were some research questions in this study that either solely or primarily investigated WTC in relation to advanced language model-generated activities. It was found that students who were exposed to these activities reported they had better confidence and less anxiety in communicative contexts. Statistical analyses using the software SPSS indicated that students using language model-generated activities had higher WTC levels than students who were in the non-intervention group. This aligned with Zerey and Cephe's (2020) finding that the use of AI-based tools meant students had less communication apprehension. In the same manner, Yildiz (2024) found that chatbots promoted students to communicate in a more

confident manner, creating an environment with low-pressure conditions that seemed to lessen anxiety related to speaking. The literature supports that advanced language model-generated activities could elevate student WTC (El-Shazly, 2021; Tai & Chen, 2023; Peng & Liang, 2025; Kim & Su, 2024; Fathi & Rahimi, 2024). The present study builds upon these findings by demonstrating that this improvement is further enhanced by utilizing advanced language models in gamified experiences. The positive impact of personalized AI-generated experiences on learner engagement is consistent with the principles of Communicative Language Teaching (CLT), which value interactive experiences in language acquisition (Hieu, 2024; Khalifa, 2025; Karataş et al., 2024; Mwakapina, 2024). Thus, AI personalization and gamification serve as a powerful way to enhance WTC, primarily by lessening anxiety and creating safe spaces to practice.

The second research question investigated the impact of sophisticated language models on learners' speaking abilities. This research exhibited notable improvement on fluency, accuracy, and complexity as a whole, which supports the capacity of AI-based tools to enhance linguistic performance. Those findings support the findings of Xue (2025), Zhao (2024), Elmadaaway et al. (2025), Kruk & Kałużna (2025), and Song & Song (2023), who all concur on the positive impact of individualized AI feedback on language acquisition. Mavidi (2025) similarly noted that AI feedback and real-time corrections or suggestions increased learner fluency, emphasizing the value of language learning with AI-based tools. Li and Lan (2022) also discussed how learners' interactions with digital platforms contributed positively to students' interactions with the linguistic output they were creating; this was also observed with the findings of this research.

Gamification appears to increase these benefits even more. In another study that compared two different learning conditions (one gamified and one non-gamified), it was found that learners made more gains in both WTC and speaking skills in the gamified learning condition. It is promising to compare this figure with the figure outlined by Huseinović (2024) on the benefits of gamified language teaching interventions. It is further promoted that the motivational advantages of gamification can improve intrinsic motivation and learner engagement (Hamari et al., 2014) through extrinsic motivational examples in game elements such as points, badges, and leaderboards. It was also noted that the participants in a gamified environment enjoyed the learning process more and were therefore more willing to engage with communicative activities. The notion of satisfying learners' needs for competence, autonomy,

and relatedness to boost intrinsic motivation was reinforced by the work of Deci and Ryan (2000), Korkealehto and Siklander (2018), Domínguez et al. (2013), and Mee Mee et al. (2020).

The positive experiences expressed by students in the gamified environment align with Pesare et al. (2016), who found that a gamified environment fosters increased engagement and motivation in comparison to traditional classroom teaching. The qualitative data we collected also supports this notion, as we learned that students stated they were more engaged and motivated while participating in these gamified activities that contained and used AI tools. The interactive nature of these activities fits with the description of Deterding et al. (2011), who explained that gamification uses flow to allow deeper engagement with a task.

Not only did we encounter some challenges in line with the prior literature, but the potential for gamification and sophisticated language models is promising. Certainly, the reliance on technology and expectations of continual updates mean we are cognizant of practical limitations connected with using language models. This finding is consistent with those of Yang et al. (2024), Kasneci et al. (2023), Chang et al. (2024), and Azoulay et al. (2025), which have identified issues related to sustaining and scaling AI-based interventions in educational contexts. We also noted variability in individual responses to gamified approaches, which suggests that further personalized interventions could enhance the utility of gamification, supporting the recommendation by Kim and Castelli (2021).

The primary question explored in this study is whether the use of gamified language activities that are supported by ChatGPT will improve more than students whose English language learning continues with traditional means. The statistical analysis and observational measures demonstrated that students in the experimental group improved significantly for both speaking skills and WTC compared to the control group. This indicates that gamified strategies supported by ChatGPT tools guided students towards a more active, oriented, motivated, and interactive approach to language learning.

Specifically, the enhancement of speaking abilities occurred as a consequence of the opportunities for repetition, the fear-free participation environment, and the immediate feedback that students can find in applications supported by technology. The findings of this research support previous findings. For example, Wang and Lin (2023) claimed that AI-supported gamified environments increased students' oral expression and allowed students to build longer meaningful sentences. Similarly, in the work of Fathi and Rahimi (2024), it was

stated that students involved in AI-based activities had more confident conversations and were more willing to express themselves in the target language.

Regarding the WTC, it was evident that student subjects in the experimental group contributed more to in-class speaking opportunities, volunteered more during group work, and developed more positive attitudes toward using the target language in context. This suggests AI-supported gamification is a pedagogical tool and source of motivation that directly impacts students' affective characteristics. AQ and Chen (2023) found evidence of what they referred to as "social risk-taking" in students increased because classroom activity that was structured using AI increased WTC levels. In agreement with this, Peng and Liang (2025) explain that AI-assisted classroom activities create a safe and stimulating communication environment for all students, especially those who are shy or low-engaged.

The lower performance of the control group, on the other hand, shows that classical teaching methods are insufficient to increase student interaction. This situation supports the notion that traditional methods can cause students to become passive, particularly in production-oriented areas such as speaking skills, as noted by Özkan and Şahin (2022). However, the digital gamification-based methods used in this study directed students to active learning through interactive tasks, scenario-based dialogues, and scoring systems.

The qualitative data collected throughout the research gave a holistic and extensive understanding of students' foreign language learning experiences through AI-supported gamified activities. With thematic analysis, eight key themes spanning a range of aspects that impact the learning experience were identified. They have shown findings that cover varying dimensions from students' motivation to participation habits, beliefs of AI-supported tools, and the impact of gamification on learning, to name a few. In this section, each theme will be presented with references to the literature, and similarities and differences to findings from prior research will be examined.

First of all, the theme of "Fun and Permanent Learning," which is one of the important results from the research, is contextualized. The research results indicate that students perceived their learning process as a considerably more fun and permanent process due to the inclusion of AI-supported gamified processes. Participants also mentioned that the lessons became more exciting, and what was learned remained in memory for a longer time. This study's findings support earlier anecdotal evidence that fun learning environments decrease students' cognitive

load, allowing a more internalized type of learning (Lu et al., 2024; Renacido & Biray, 2025; Samur & Cömert, 2024; İsmail & Alharkan, 2024; Alam & Mohanty, 2023; Zhang, 2025). Colorful visuals, forms of competition, and immediate feedback highly influenced students' motivation to learn and retained the information as permanent knowledge. One participant commented, "Lessons became much more memorable because we learned while having fun," an excellent example of this finding. This finding further signifies that learning should be emotionally mediated throughout the process of transferring knowledge, as represented in this overall research study.

One of the significant findings of this study is the increase in students' active participation levels in class. Participants reported that gamified activities lengthened their attention spans and enabled them to engage with their respective classes more actively. This result is supportive of the notion that active participation is a fundamental element in the learning process (Zauinuddin, 2018; Lamrani & Abdelwahed, 2020; Duggal et al., 2021). Particularly with interactive competitions and group assignments, it kept students consistently involved with the class activities. Given a student's comment of "I usually get very bored in class, but I lost track of time when I was doing these activities," this is a key instance for the creation of active participation as a result of gamification. The findings concur with previous research in the regard that student-centered teaching strategies (such as gamification) stimulate an interest in learning (Tang, 2023; Kang & Keinonen, 2018; Lee & Hannafin, 2016). Therefore, it can be understood that this particular kind of activity has both motivational and structural effects in relation to learning.

AI-supported learning was another dominant theme from the research. Respondents reported that learning had been quickened, made more personalized, and more effective by AI tools. This result supports the recent relevant literature (Frank, 2024; Tapalova & Zhiyenbayeva, 2020; Amoako et al., 2024; Ayeni et al., 2024), noting the implications of the enabling role of artificial intelligence tools for personalized learning. Students stated that immediate feedback provided them the opportunity to find mistakes and correct them quickly. However, several respondents expressed concerns that the facilitative nature of artificial intelligence tools may diminish students' critical thinking skills in the future. This expressed concern highlights the approach of critically thinking towards the use of technological tools in education, which was further supported by Zhai et al. (2024) and Vieriu and Petrea (2025). This

finding indicates that a careful balance must be achieved in the teaching process for AI-supported learning to be effective.

Another important recurring theme in the study, however, is that learning should not only be seen as acquiring knowledge but also as a continuous and motivational process. Participants acknowledged that their learning processes were enriched and became enjoyable with the help of activities and group work. Evaluating this in light of Vygotsky's (1978) social interaction theory, it is acknowledged that learning is recognized as taking place more effectively in a social milieu. One of the participants pointed out, "Learning together with friends was much more enjoyable and helped me to retain (to remember) more information." Zubairu (2016) also states that learning strategies focused on social interaction will help to strengthen the permanence of learning due to the rise in knowledge sharing through interpersonal relationships. These findings suggest that gamifying learning has the potential to support both the individual and social aspects of learning.

The results of the study indicated that friendly competition could be a useful factor in increasing learning motivation. Student group competitions, ideally for a scoring system, have created a competition of a healthy nature. Within the context of Ryan and Deci's (2024) self-determination theory, competition was observed to contribute positively to the learning process in cases when competition supported intrinsic motivation. For example, one student said, "I learned more without knowing it while I was trying to win." These results also indicate that if competition in education is structured properly, competition can lead to more effective learning experiences for students (Francisco Moreno-Ger & Hervás, 2022).

As in every learning environment, various challenges students face have also been identified in this study. Especially technical malfunctions and vocabulary deficiencies have occasionally emerged as obstructive factors in students' learning processes. Alsabawy et al. (2013) claimed that the effective use of educational technologies depends on the quality of the infrastructure. In the study, students stated that they tried to overcome technical problems and viewed this process as part of their learning. This situation reveals that the development of technological skills has become a fundamental competency in modern educational environments.

Students reported that while gamification is an effective method, it should be presented in a balanced manner alongside traditional teaching methods. Some participants noted that

continuous gamification loses its effectiveness over time and may reduce the seriousness of the lesson. This finding supports the work of Syafril et al. (2021), Raes et al. (2020), Shen and Shao (2022), Mirzoeva et al. (2024), and Bozkurt (2022), who argue that hybrid learning models are effective. Especially, the importance of maintaining the fundamental building blocks of traditional methods is emphasized for the balanced distribution of cognitive load and the preservation of learning objectives. Therefore, gamification in instructional design needs to be structured following pedagogical principles.

Students have stated that gamification can be effective in teaching foreign languages and other subjects. Additionally, they have suggested diversifying activities and increasing personalized gamification options. These views are consistent with the literature supporting the interdisciplinary applicability of gamification and its adaptability to different learner profiles (Sezgin & Yüzer, 2022; Redondo-Rodríguez et al., 2022; Kamunya et al., 2020; Freitas et al., 2017; Zhao et al., 2021). Student suggestions provide important points to consider at the technological and pedagogical levels for future implementations.

Considering all of this evidence, the qualitative findings obtained in this research seem to indicate that AI-supported gamification is an effective method for enhancing student motivation, engagement, and learning retention. However, for this effect to be sustainable, gamification needs to be integrated with traditional methods in a balanced manner through careful planning, and technological infrastructure must be supported. The findings validate the existing literature approaches and offer new perspectives for future research. Our study also highlights the need for further research to investigate the long-term effects of gamification on language proficiency. Longitudinal studies could provide deeper insights into whether the motivational benefits and improvements in language skills observed here are sustained over time. Additionally, future research could investigate how personalized gamification strategies can be implemented on a larger scale to accommodate the diverse needs of learners.

In summary, this research adds to an expanding body of work on technology-enhanced language learning, showing that the integration of gamification and language models with AI can effectively enhance learners' WTC and speaking performance. The findings both resonate with previous studies and add new perspectives to our understanding of AI and gamification as joint forces. The findings suggest that additional research using AI-gamified learning experiences may be a promising approach to harness the components of effective language learning that can be engaging, personalized, and effective. As we move forward to incorporate

these advancements in technology in a systematic fashion, we must also acknowledge the technological limitations and differences in learners.

5.2. Conclusion

The present study evaluated the effects of gamified activities created by advanced language models on foreign language learning. The study was conducted at the preparatory school of Necmettin Erbakan University, using experimental and control groups, and examined the interaction in language learning processes and the activity's potential to increase motivation for learning.

The results show that students in the experimental group exhibited statistically significant improvements in both speaking skills and WTC in comparison to students in the control group. More importantly, students who took a course involving the use of gamified activities with ChatGPT were able to improve their spoken skills and WTC to a statistically significant level. Overall, the results suggest that advanced language models and gamification techniques could enhance language learning processes, increase language learning forms of engagement and interaction, and lead to greater WTC. For this reason, it is suggested that these technologies be used and integrated into future developments of educational technologies and teaching methods. The study also discussed implications with a focus on how advanced language models and gamification could be implemented in language teaching practice and learning, clarified the implications of studying the use of technology for language teaching pedagogy in teacher education, and suggested that advanced language models could be incorporated into future research. While there is a need to use innovative teaching approaches to language teaching, the nature of technology should also open up opportunities for students' learning experiences.

5.3. Implications

The findings of this study have significant implications for the integration of advanced language models and gamified activities into classroom practices in foreign language education. Firstly, the positive impact of gamification-based tasks generated by ChatGPT on students' speaking skills and WTC demonstrates that LLMs can be used as an effective support tool in language teaching. The interactive, level-appropriate, and context-based speaking activities offered by ChatGPT have increased students' oral production and reduced communication anxiety, creating a more encouraging and participatory learning environment.

When evaluated from a pedagogical perspective, these results indicate the importance of using artificial intelligence to support communication-based language teaching. Teachers can use AI tools like ChatGPT to design speaking activities that could take a long time to prepare manually in a faster, more personalized, and meaningful way. Especially in contexts where teachers have a high workload or limited time for material development, AI-supported content production offers an innovative solution that can support students' fluency, classroom participation, and learning motivation.

Additionally, the combination of AI-generated content with gamification elements has increased students' interest in the lesson, fostered task-oriented participation, and enhanced their willingness to take communicative risks. This situation, when evaluated from the perspective of curriculum developers and education policymakers, indicates that integrating AI-supported gamified activities into foreign language programs can make the language learning process more student-centered and interactive.

The study's findings also have significant implications for teacher training programs. The increasing presence of artificial intelligence tools in educational contexts necessitates that language teachers possess the knowledge and skills to integrate these technologies into their classroom practices effectively. Therefore, both pre-service and in-service teacher training programs should be restructured to include the pedagogical and ethical use of generative artificial intelligence.

Ultimately, the findings of this research provide several avenues for future studies. Although the current study was conducted within a specific age group and context, there is a need for research examining how ChatGPT-supported gamification applications impact different age groups, language levels, and skill areas. Furthermore, longitudinal studies could be conducted to evaluate the long-term effects of such technologies, providing more in-depth findings regarding the sustainability of AI-based language teaching.

5.4. Suggestions

This section presents recommendations derived from the study's findings. The recommendations were categorized into three broad areas: Recommendations for Educational Practitioners and Policy Makers, Recommendations for Educational Researchers, and Recommendations for Educational Technologists and Developers. These recommendations

offer guidance to inform the implementation, further studies, and technological development in gamification for language learning.

5.4.1 Suggestions for Educational Practitioners and Policy Makers

Schools and language institutions should consider adopting advanced language model technologies into their programs. Existing tools can supplement traditional approaches to provide personalized learning and feedback, which are necessary for learners to engage more quickly in their language learning. Research supports the idea that gamification can have a positive influence on learner engagement and outcomes; therefore, educators should design and/or develop gamified learning modules to stimulate learner motivation while enhancing the overall learning experience. Educators can receive guidance on incorporating gamification frameworks into their learning activities through training sessions. Encourage teachers to engage in professional development related to the use of AI technology and gamification in education. The training should consider issues relating to the pedagogical basis, technical use, and ethical use when incorporating AI into learning spaces.

5.4.2 Suggestions for Educational Researchers

Use longitudinal studies to evaluate the long-term effect of language model-generated activities on language learning. Longitudinal studies would determine whether participants could sustain improvements in speaking skills and WTC. Future research should investigate the potential for more advanced language models and gamification across various educational contexts and learner demographics, including age, proficiency, and cultural background. Future research should also engage in comparative studies evaluating the effectiveness of different types of educational technologies. Comparisons of educational technology will help to identify best practices and beneficial features of the technologies.

5.4.3 Suggestions for Educational Technologists and Developers

Developers should encourage the design and development of accessible, flexible language learning technologies to support a diversity of learning styles and contexts. Efforts should also be made to build user-facing interfaces that cater to learners of all ages and backgrounds. Additionally, as the incorporation of AI becomes mainstream in educational settings, developers must consider the ethical implications of educational technologies. The goal should be to design technologies that help to promote equity and not exacerbate biases. As many politicians and scholars have argued, there is a critical need for ethics to be incorporated into the design process and for ethical considerations and guidelines to be integrated into the

design activities associated with learning technology. Encourage collaborations among age cohorts with technologists, educators, and linguists when developing educational technology, to ensure a sound pedagogical and practical application for learners and teaching practices.

These recommendations aim to inform future actions and research directions based on the study's results. Engaging with these areas will enhance the efficacy of stakeholders' language learning interventions and broaden their understanding of how advanced technology can be effectively employed in educational contexts.



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GELİŞMİŞ BİR DİL MODELİ KULLANILARAK OYUNLAŞTIRMA YOLUYLA YABANCI DİL ÖĞRENİMİNİN GELİŞTİRİLMESİ

Beyza AKINCI

1. GİRİŞ

Bu araştırma, ileri düzey dil modelleri tarafından üretilen oyunlaştırma aktivitelerinin yabancı dil öğrenimine olan katkısını incelemeyi amaçlamaktadır. Oyunlaştırma ve yapay zeka teknolojilerinin birleştirilmesi, öğrenme süreçlerini kişiselleştirerek dillerin öğrenilmesini daha etkili ve ilgi çekici hale getirebilir. Giriş bölümü, çalışmanın temel yapı taşlarını ve araştırmanın yönlendirilmesine yardımcı olacak temel kavramları sunar. yabancı dil öğrenimi, bireylerin yeni dil becerileri kazanmalarını gerektiren zorlu bir süreçtir. Geleneksel yöntemler, genellikle katılımcı motivasyonunu sürdürmede yetersiz kalmaktadır. Teknolojinin hızla geliştiği bu dönemde, dil öğrenimini desteklemek için yeni yaklaşımların araştırılması kaçınılmaz hale gelmiştir. İleri dil modelleri, doğal dil işleme ve metin üretimi gibi alanlarda yüksek performans göstermektedir ve bu, onları yabancı dil eğitiminde potansiyel bir araç haline getirmektedir. Bu modeller, kişisel öğrenme deneyimleri sunarak dil öğrenim süreçlerini zenginleştirebilir. Öğrencilerin dil pratiği yapma şekillerini dönüştürerek, daha doğal ve etkileşimli bir öğrenme ortamı sağlarlar. Bu özellikler, öğrencilerin dil becerilerini gerçek zamanlı olarak geliştirmelerine olanak tanırken, aynı zamanda kültürel anlayışlarını da derinleştirebilir. Geleneksel yabancı dil eğitimi yöntemleri, öğrencilerin sürdürülebilir motivasyonunu ve iletişim kurma istekliliğini sağlama konusunda yetersiz kalmaktadır. Bu bağlamda, ileri dil modellerinin entegrasyonu ve oyunlaştırma tekniklerinin uygulanması, öğrenme sürecini daha etkileşimli ve motive edici hale getirebilir. Ancak, bu teknolojilerin yabancı dil becerileri üzerindeki etkisinin boyutu ve niteliği konusunda daha fazla bilgiye ihtiyaç vardır.

1.2. Çalışmanın Amacı

Bu çalışmanın temel amacı, ileri dil modelleri kullanılarak geliştirilen oyunlaştırma aktivitelerinin, yabancı dil öğrenen öğrencilerin motivasyonunu, iletişim kurma isteğini ve

konuşma becerilerini nasıl etkilediğini değerlendirmektir. Araştırma, Necmettin Erbakan Üniversitesi'nde hazırlık sınıfı düzeyindeki öğrenciler üzerinde yürütülerek, AI destekli öğrenme aktivitelerinin dil öğrenimine olan katkısını ölçmeyi hedeflemektedir.

Yabancı dil eğitiminde öğrencilerin motivasyonunu ve iletişim kurma isteğini sürekli olarak yüksek tutmak, geleneksel eğitim metodlarıyla sıklıkla başılamamaktadır. Öğrenciler, dil öğrenme sürecinde sıklıkla monotonluk ve motivasyon eksikliği yaşamaktadır. Bu çalışma, ileri dil modelleri ve oyunlaştırma tekniklerinin, öğrenme sürecini nasıl daha etkileşimli ve motive edici hale getirebileceğini araştırmayı amaçlamaktadır. Ayrıca, bu teknolojik yaklaşımların öğrencilerin gerçek dil kullanımı becerilerini ve iletişim kurma istekliliklerini ne ölçüde iyileştirebileceğini belirlemeyi hedefler.

1.3. Çalışmanın Önemi

Bu çalışmanın önemi, yabancı dil öğretimindeki geleneksel yaklaşımların sınırlılıklarını aşarak, dil öğrenme süreçlerini zenginleştirmek ve daha etkili hale getirmek için ileri teknoloji çözümlerinin potansiyelini ortaya koymasındır. İleri dil modelleri ve oyunlaştırma stratejilerinin entegrasyonu, dil öğrenimi için yenilikçi bir yaklaşım sunarak, öğrencilerin dil becerilerini, motivasyonlarını ve iletişim kurma istekliliklerini artırma potansiyeline sahiptir. Bu, özellikle motivasyon eksikliği ve sürdürülebilir öğrenme ilgisi zorluklarıyla mücadele eden dil öğrencileri için büyük bir fırsat sunmaktadır.

Bu araştırma, yapay zekanın eğitim alanındaki uygulamalarına dair mevcut literatüre önemli katkılarda bulunur. İleri dil modellerinin, özelleştirilmiş öğrenme deneyimleri sağlama ve öğrenci başarısını artırma kapasitesini göstermesi, eğitim teknolojilerinin gelecekteki gelişimine yön verebilir. Ayrıca, oyunlaştırma elementlerinin öğrenme motivasyonu üzerindeki etkisini detaylı bir şekilde incelenmesi, eğitimciler ve müfredat geliştiriciler için değerli içgörüler sunar.

Bu çalışma, yabancı dil öğretiminde karşılaşılan bazı ana zorlukların üstesinden gelmek için pratik çözümler önermektedir. Oyunlaştırma ve AI destekli etkileşimler, dil öğrenimini daha çekici ve etkileşimli hale getirerek, öğrencilerin dil pratiği yapma süreçlerini doğal bir şekilde geliştirebilir. Bu, öğrencilerin dil becerilerini ve kültürel anlayışlarını zenginleştirirken, eğitimcilerin öğrenci ilgisini ve katılımını maksimize etme şekillerini de dönüştürebilir.

Araştırmanın bulguları, ileri dil modelleri ve oyunlaştırma tekniklerinin yabancı dil öğrenimi üzerindeki etkilerini teorik ve uygulamalı açıdan derinlemesine ele almaktadır. Bu sonuçlar, dil öğrenimi teorilerinin gelişimine katkıda bulunabilir ve yabancı dil öğretimi stratejilerinin yeniden şekillendirilmesine yardımcı olabilir. Ayrıca, bu çalışma, ileri teknoloji tabanlı öğrenme araçlarının, dil eğitimi alanında nasıl entegre edilebileceğine dair yol gösterici bir kaynak oluşturabilir.

1.4. Metodoloji

Bu araştırma, Necmettin Erbakan Üniversitesi'nin Hazırlık Okulu'nda yürütülmüştür ve çalışma, 2023-2024 akademik yılı boyunca 10 hafta süren bir dönemde gerçekleştirilmiştir. Araştırma, dil öğreniminde oyunlaştırma ve ileri dil modellerinin etkilerini karşılaştırmak amacıyla karma bir yöntem kullanmıştır.

Araştırmanın örneklemini, üniversitenin Hazırlık Okulu'nda İngilizce dil eğitimi alan 18-20 yaş arası 60 öğrenci oluşturmuştur. Öğrenciler, çalışma başlamadan önce rastgele olarak deney ve kontrol gruplarına ayrılmıştır. Toplamda, deney grubunda 26 öğrenci ve kontrol grubunda 28 öğrenci yer almıştır. Araştırmanın başında altı öğrenci çalışmadan çekilmiş, bu da toplam katılımcı sayısını 54'e düşürmüştür.

Çalışma, nicel ve nitel veri toplama yöntemlerini birleştiren karma bir araştırma tasarımına dayanmaktadır. Deney grubuna, ileri dil modeli tarafından tasarlanan oyunlaştırılmış dil öğrenme aktiviteleri sunulurken, kontrol grubu geleneksel ders materyalleri ve yöntemlerle eğitim görmüştür. Nicel veri toplama araçları olarak, Cambridge Assessment English Key English Test (KET) ve McCroskey & Baer (1985) tarafından geliştirilen İletişim Kurma İsteği (WTC) ölçeği kullanılmıştır. Her iki grup da çalışmanın başında ve sonunda bu testlerle değerlendirilmiştir. Nitel veriler, deney grubundan seçilen 15 öğrenci ile yapılan yarı yapılandırılmış mülakatlar aracılığıyla toplanmıştır. Mülakatlar, öğrencilerin oyunlaştırma aktivitelerine olan tepkilerini, bu aktivitelerin öğrenme deneyimlerine etkilerini ve motivasyonlarındaki değişiklikleri derinlemesine anlamak için tasarlanmıştır.

Deney grubuna, haftada iki kez, toplamda 10 hafta süresince, derslerin içeriğine uygun şekilde tasarlanmış AI destekli oyunlaştırma aktiviteleri sunulmuştur. Her aktivite, öğrencilerin dil becerilerini pratik yapmalarını sağlayacak şekilde interaktif ve katılımcı odaklı olacak biçimde düzenlenmiştir. Kontrol grubu ise aynı dönemde geleneksel ders kitapları ve yöntemlerle eğitime devam etmiştir. Nicel veriler, SPSS yazılımı kullanılarak analiz

edilmiştir. İstatistiksel testler, deney ve kontrol gruplarının başlangıç ve bitiş test sonuçları arasındaki farkları belirlemek için kullanılmıştır. Nitel veriler, içerik analizi yöntemiyle kodlanmış ve tematik olarak sınıflandırılmıştır. Bu analiz, katılımcıların deneyimlerini ve algılarını geniş bir perspektiften değerlendirmek için yapılmıştır.

1.5. Bulgular

Bu bölüm, deney ve kontrol gruplarındaki öğrencilerin İletişim Kurma İsteği (WTC) ve Konuşma Becerileri üzerine yapılan ölçümlerden elde edilen istatistiksel sonuçları içermektedir. Bulgular, bu iki grup arasındaki karşılaştırmalı analizleri ve her iki testten elde edilen önemli farklılıkları detaylandırmaktadır.

Deney grubundaki öğrencilerin WTC ön-test ortalaması 21,19 (ss=3,94) iken, son-test ortalaması 25,62 (ss=2,10) olarak ölçülmüştür. Kontrol grubunda ise ön-test ortalaması 22,25 (ss=6,29), son-test ortalaması 24,07 (ss=3,03) olarak belirlenmiştir. Deney grubundaki öğrencilerin WTC skorlarındaki artış, kontrol grubuna göre istatistiksel olarak daha belirgin olmuştur. Eşleştirilmiş t-test sonuçları, deney grubundaki değişimin anlamlılığını $t = -7.597$, $p < .001$ olarak göstermiştir. Bu sonuçlar, deney grubundaki öğrencilerin, AI destekli oyunlaştırma aktiviteleri sayesinde iletişim kurma istekliliklerinde önemli bir artış yaşadıklarını göstermektedir. Etki büyüklüğü (Cohen's d) 1.49 olarak hesaplanmıştır, bu da güçlü bir etki büyüklüğünü işaret etmektedir.

Konuşma becerileri üzerine yapılan ön-test ve son-test karşılaştırmalarında, deney grubundaki öğrencilerin ön-test ortalaması 13,15 (ss=1,46), son-test ortalaması ise 15,35 (ss=1,67) olarak kaydedilmiştir. Kontrol grubunda bu değerler ön-testte 13,50 (ss=1,40) ve son-testte 14,30 (ss=1,60) şeklinde ölçülmüştür. Deney grubundaki öğrencilerin konuşma becerilerindeki artış, kontrol grubundakine göre istatistiksel olarak anlamlı bir fark göstermiştir. Eşleştirilmiş t-test sonuçları deney grubu için $t = -11.400$, $p < .001$ olarak belirlenmiştir. Etki büyüklüğü (Cohen's d) bu grupta 2.24 olarak hesaplanmıştır, bu da yine güçlü bir etki büyüklüğüne işaret etmektedir.

Her iki ölçekte de deney grubunun performansı, kontrol grubunun performansına göre daha fazla iyileşme göstermiştir. Bu sonuçlar, ileri dil modelleri tarafından tasarlanmış oyunlaştırma aktivitelerinin yabancı dil öğrenimi üzerinde önemli ve olumlu bir etkisi olduğunu ortaya koymaktadır. Özellikle konuşma becerileri ve iletişim kurma isteği açısından, AI destekli yaklaşımların geleneksel yöntemlere göre daha etkili olduğu görülmektedir. Bu bulgular,

araştırmanın temel hipotezlerini doğrulamakta ve ileri dil modelleri ile oyunlaştırmanın dil öğrenimine olan etkisini somut verilerle göstermektedir.

1.6. Sonuç

Bu çalışma, ileri dil modelleri tarafından tasarlanmış oyunlaştırma aktivitelerinin yabancı dil öğrenimine olan etkilerini incelemiştir. Araştırma, Necmettin Erbakan Üniversitesi hazırlık okulunda, deney ve kontrol grupları üzerinde yürütülmüş, dil öğrenimi süreçlerindeki etkileşimi ve öğrenme motivasyonunu artırma potansiyelini değerlendirmiştir. Bulgular, deney grubundaki öğrencilerin konuşma becerileri ve iletişim kurma istekliliklerinde kontrol grubuna göre istatistiksel olarak anlamlı gelişmeler gösterdiğini ortaya koymuştur. Özellikle, AI destekli oyunlaştırma aktivitelerine maruz kalan öğrencilerin, konuşma becerilerinde ve iletişim kurma isteğinde belirgin bir artış yaşadıkları görülmüştür. Bu sonuçlar, ileri dil modellerinin ve oyunlaştırma tekniklerinin, dil öğrenimi süreçlerini zenginleştirme ve daha etkileşimli hale getirme konusunda önemli bir potansiyele sahip olduğunu göstermektedir. Dolayısıyla, eğitim teknolojilerinin ve öğretim stratejilerinin geliştirilmesinde, bu tür araçların entegrasyonu önerilmektedir. Araştırma aynı zamanda, ileri dil modelleri ve oyunlaştırmanın dil eğitimi uygulamalarında nasıl etkili bir şekilde kullanılabileceğine dair değerli bilgiler sağlamaktadır, bu da gelecekteki uygulamalara ve araştırmalara yol gösterici olabilir. Bu bulgular, dil öğretiminde yenilikçi yaklaşımların benimsenmesi gerektiğini ve teknolojinin öğrenme deneyimlerini nasıl dönüştürebileceğini vurgulamaktadır.

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APPENDICES

APPENDIX 1- Speaking Skill Pre-Test and Post-Test

Test 1

Part 1 (3-4 minutes)

Phase 1

Interlocutor

To both candidates Good morning / afternoon / evening.
Can I have your mark sheets, please?

Hand over the mark sheets to the Assessor.

I'm, and this is

To Candidate A What's your name?

To Candidate B And what's your name?

Back-up prompts

	B , do you work or are you a student?	Do you work? Do you study? Are you a student?
<i>For UK, ask</i>	Where do you come from?	Are you from (Spain, etc.)?
<i>For Non-UK, ask</i>	Where do you live?	Do you live in ... (name of district / town etc.)?
	Thank you.	
	A , do you work or are you a student?	Do you work? Do you study? Are you a student?
<i>For UK, ask</i>	Where do you come from?	Are you from (Spain, etc.)?
<i>For Non-UK, ask</i>	Where do you live?	Do you live in ... (name of district / town etc.)?
	Thank you.	

Phase 2

Interlocutor

Now, let's talk about **friends**.

A, how often do you see your friends?

What do you like doing with your friends?

B, where do your friends live?

When do you see your friends?

Extended Response

Now **A**, please tell me something about one of your friends.

Back-up prompts

Do you see your friends every day?

Do you like going to the cinema?

Do your friends live near you?

Do you see your friends at weekends?

Back-up questions

Do you like your friend?

Where did you meet your friend?

Did you see your friends last weekend?

Interlocutor

Now, let's talk about **home**.

B, who do you live with?

How many bedrooms are there in your house / flat?

A, where do you watch TV at home?

What's your favourite room in the house?

Back-up prompts

Do you live with your family?

Are there three bedrooms in your house / flat?

Do you watch TV in the kitchen?

Is your bedroom your favourite room?

Extended Response

Now, **B**, please tell me something about the things you like doing at home, at the weekends.

Back-up questions

Do you like cooking at the weekends?

Do you play computer games at the weekends?

What did you do at home, last weekend?

Part 2 (5-6 minutes)

Phase 1

Interlocutor

⌚ 3-4 minutes

Now, in this part of the test you are going to talk together.

Place **Part 2** booklet, open at **Task 2a**, in front of candidates.

Here are some pictures that show **different places to eat**.

Do you like these different places to eat? Say why or why not. I'll say that again.

Do you like these different places to eat? Say why or why not.

All right? Now, talk together.

Candidates

.....

⌚ Allow a minimum of 1 minute (maximum of 2 minutes) before moving on to the following questions.

**Interlocutor /
Candidates**

Use as appropriate.

Ask each candidate
at least one
question.

Do you think...

...eating on the beach is fun?

... eating in restaurants is expensive?

...eating at home is boring?

... eating at college/work is cheap?

... eating in the park is nice?

Optional prompt

Why?/Why not?

What do **you** think?

Interlocutor

So, **A**, which of these places to eat do you like best?

And you, **B**, which of these places do you like best?

Thank you. (Can I have the booklet, please?) Retrieve **Part 2** booklet.

Phase 2

Interlocutor

⌚ Allow up to 2
minutes

Now, do you prefer eating with friends or family, **B**? (Why?)

And what about you, **A**? (Do you prefer eating with friends or family?) (Why?)

Do you prefer eating at home or in a restaurant, **A**? (Why?)

And you, **B** (Do you prefer eating at home or in a restaurant?) (Why?)

Thank you. That is the end of the test.

Do you like these different places to eat?



APPENDIX 2- WTC Questionnaire

Here are 12 situations in which you might choose to communicate or not to communicate. Please indicate the percentage of time you would choose to communicate in each type of situation below (0 = never communicate , 100 = always communicate).

0%	50%	100%
I never communicate	I sometimes communicate	I always communicate

APPENDIX 3- Interview Questions

Interview Questions

1. Can you describe your overall experience with the gamified language learning activities? What stood out to you the most?
2. How engaged did you feel during the gamified learning sessions compared to traditional learning methods?
3. In your opinion, how did the use of advanced language models influence your learning experience?
4. Do you feel that gamification helped you learn the language more effectively? Please provide examples or reasons for your answer.
5. What aspects of the gamified activities motivated you the most to learn?
6. Were there any challenges or difficulties you encountered in the gamified learning process? How did you overcome them?
7. Do you prefer gamified language learning to traditional methods? Why or why not?
8. Which specific activities or elements of the program did you find most beneficial for your language learning?
9. What improvements or changes would you suggest for future gamified language learning activities?
10. Based on your experience, would you be inclined to use gamified methods for learning other subjects or skills? Why?

APPENDIX 4- ChatGPT Activities

ChatGPT

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explaining their daily routine using the adverbs of frequency.

This activity can be enhanced by having classmates ask questions about each other's routines.

Activity 2: "Frequency Survey"

Objective: To use adverbs of frequency in a real-world context by conducting surveys among classmates.

Materials Needed:

- Survey worksheets with questions about daily activities
- Pens or pencils

Instructions:

- Prepare a survey worksheet with questions about daily activities, such as "How often do you exercise?" or "How frequently do you watch TV?"
- Students circulate around the classroom, asking their classmates these questions and noting down their answers using adverbs of frequency.
- After completing the surveys, students can share interesting findings with the class, such as "Most of us never skip breakfast" or "Some classmates always read before bed."
- This activity encourages interaction and practice in both asking and answering

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Materials Needed:

- Survey worksheets with questions about daily activities
- Pens or pencils

Instructions:

- Prepare a survey worksheet with questions about daily activities, such as "How often do you exercise?" or "How frequently do you watch TV?"
- Students circulate around the classroom, asking their classmates these questions and noting down their answers using adverbs of frequency.
- After completing the surveys, students can share interesting findings with the class, such as "Most of us never skip breakfast" or "Some classmates always read before bed."
- This activity encourages interaction and practice in both asking and answering questions using adverbs of frequency.

These activities not only teach the usage of adverbs of frequency but also encourage students to talk about their personal routines and habits, making the learning process more relatable and engaging. Would these activities suit your class, or do you need more ideas or adjustments?

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Activity: "Heroes of History"

Objective: To practice simple past tense with a focus on regular and irregular verbs through the exploration of inspiring historical figures or events.

Materials Needed:

- Short biographies or stories of inspiring historical figures or events, ensuring a mix of regular and irregular verbs in the past tense.
- Worksheets with fill-in-the-blank sentences from these stories.

Instructions:

1. **Introduction:** Start with a brief discussion about what makes a story or person inspiring. This can include traits like bravery, innovation, kindness, etc.
2. **Story Reading:** Distribute the short biographies or stories among the students. You can assign the same story to the whole class or different stories to groups/pairs for variety.
3. **Identify the Verbs:** After reading, students identify and list the verbs in the past tense found in the story. They should categorize them into regular and irregular verbs.
4. **Worksheet Activity:** Hand out worksheets with sentences from the stories but with missing verbs. Students fill in the blanks using the correct form of the regular or

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4. **Worksheet Activity:** Hand out worksheets with sentences from the stories but with missing verbs. Students fill in the blanks using the correct form of the regular or irregular verbs in the past tense.
5. **Group Discussion:** In groups or pairs, students discuss the stories, focusing on why these stories are inspiring and the actions (expressed through verbs) that made the characters or events memorable.
6. **Presentation:** Each group or student presents their story to the class, emphasizing the past tense verbs and explaining why they found the story inspiring.
7. **Reflection:** Conclude the activity with a reflective discussion on how learning about these figures/events can inspire their own actions.

Extension Activity (optional): Students can write a short paragraph about a personal hero or an inspiring event in their life, using both regular and irregular verbs in the past tense.

This activity is not only educational in terms of grammar but also enriching, as it allows students to learn about inspiring figures and events while practicing language skills. Does this activity meet your needs, or would you like any modifications or additional ideas?

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Activity 1: "A Day in My Life" - Timeline Creation

Objective: To practice using adverbs of frequency (such as always, usually, often, sometimes, rarely, never) in the context of daily routines.

Materials Needed:

- Blank paper or timeline templates
- Markers, pens, or pencils

Instructions:

1. Each student creates a timeline of their typical day, from waking up to going to bed.
2. They label different times of the day and write activities they do, using adverbs of frequency. For example, "I usually have breakfast at 8 am," "I sometimes go for a walk after dinner."
3. Students can add illustrations to their timelines to make them more engaging.
4. Once completed, students present their timelines to the class or in small groups, explaining their daily routine using the adverbs of frequency.
5. This activity can be extended by having classmates ask questions about each other's routines.

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Absolutely, let's try a different approach to teach the present perfect tense with a sports theme for elementary-level students. Here's another activity idea:

Activity: "Sports Journalist Interviews"

Objective: To practice the present perfect tense by role-playing as sports journalists and athletes, focusing on athletes' careers and achievements.

Materials Needed:

- A list of famous athletes (real or fictional) from various sports.
- Cue cards with questions using the present perfect tense.
- Optional: Props like microphones or notepads for the interviews.

Setup:

1. Prepare a list of athletes and corresponding cue cards with interview questions.
2. Organize students into pairs.

Instructions:

1. **Role Assignment:** Each pair chooses or is assigned one athlete from the list. One student plays the role of the athlete, and the other is the sports journalist.
2. **Preparation:** The journalist student receives cue cards with questions that utilize the

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1. **Role Assignment:** Each pair chooses or is assigned one athlete from the list. One student plays the role of the athlete, and the other is the sports journalist.

2. **Preparation:** The journalist student receives cue cards with questions that utilize the present perfect tense, such as "How many championships have you won?" or "What countries have you competed in?"

3. **Interview:** The journalist conducts an interview with the athlete, asking questions from the cue cards. The athlete answers in the first person, using the present perfect tense.

4. **Switch Roles:** After a set amount of time, students switch roles, with the athlete becoming the journalist and vice versa.

5. **Group Sharing:** After the interviews, pairs can share some interesting facts they have learned about their athletes with the class.

6. **Discussion:** Lead a class discussion on how the present perfect tense is used to talk about life experiences, focusing on the context of a sports career.

7. **Extension Activity (optional):** Students can write a short news article or a sports blog post about the athlete they interviewed, using the present perfect tense to describe the athlete's achievements and experiences.

This activity not only teaches the present perfect tense but also encourages creativity, speaking skills, and learning about different sports and athletes. Does this revised activity align better with your needs, or would you like another suggestion?

A screenshot of a ChatGPT interface. At the top, the header says "ChatGPT 4" with a small downward arrow. In the top right corner, there is a share icon. The conversation history shows three messages: 1. A green bubble from "You" saying "It is great! Thank you so much! See you next week". 2. A purple bubble from "ChatGPT" responding with a friendly message about future questions and assistance. 3. A green bubble from "You" asking for help with a question about "sports journalist interviews". Below this, a purple bubble from "ChatGPT" offers assistance. At the bottom, there is a text input field with the placeholder "Message ChatGPT..." and a green send button with an upward arrow. A small feedback icon is visible in the bottom right corner.

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Of course! Feel free to ask any questions you have about the "Sports Journalist Interviews" activity. Whether it's about implementation, modifications, or anything else related to the activity, I'm here to help!

You

Can you write the athletes names and the interview questions please

ChatGPT

Certainly! Here's a list of athlete names and corresponding interview questions for the "Sports Journalist Interviews" activity. I'll include a mix of real and fictional athlete names to encourage creativity and make the role-playing aspect more engaging for your students.

Athlete Names

1. Michael Jordan (Basketball)
2. Serena Williams (Tennis)
3. Usain Bolt (Track and Field)
4. Mia Hamm (Soccer)
5. Tiger Woods (Golf)
6. Alex Morgan (Soccer)

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"Sports Journalist Interviews" activity. I'll include a mix of real and fictional athlete names to encourage creativity and make the role-playing aspect more engaging for your students.

Athlete Names

1. Michael Jordan (Basketball)
2. Serena Williams (Tennis)
3. Usain Bolt (Track and Field)
4. Mia Hamm (Soccer)
5. Tiger Woods (Golf)
6. Alex Morgan (Soccer)
7. Lionel Messi (Soccer)
8. Simone Biles (Gymnastics)
9. Sachin Tendulkar (Cricket)
10. Ellie Challenger (Fictional Swimmer)
11. Max Speedster (Fictional Race Car Driver)
12. Luke Skywalker (Fictional Lightsaber Champion)
13. Lara Swift (Fictional Mountain Climber)
14. Tony Hawk (Skateboarding)
15. Venus Williams (Tennis)

Interview Questions

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Lara Swift (Fictional Mountain Climber)

Tony Hawk (Skateboarding)

Venus Williams (Tennis)

Interview Questions

1. How many championships have you won in your career?
2. What countries have you competed in?
3. How long have you been playing your sport professionally?
4. What major challenges have you overcome in your career?
5. Which achievement are you most proud of?
6. How many records have you set or broken?
7. Who have you trained with that influenced your career the most?
8. What injuries have you suffered, and how did you recover?
9. Have you participated in the Olympics, and what was that experience like?
10. How has your sport changed since you started playing?
11. What important lessons have you learned through your sport?
12. Have you ever thought about retiring, and what would you do afterwards?
13. How do you prepare for a big competition?
14. What advice would you give to young athletes?
15. What goals do you still have in your career?

These questions are designed to encourage a use of the present perfect tense and can be adjusted or expanded based on your specific teaching needs. Feel free to

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Activity Overview: "The World in 2073"

Objective: To encourage students to use their imagination and critical thinking skills to envision and discuss how various aspects of life might change in the next 50 years.

Part 1: Introduction (10 minutes)

- **Brief Introduction:** Start with a quick introduction about how technology, society, and the environment have changed over the past 50 years. Use examples that are relatable for elementary students.
- **Setting the Scene:** Explain that they will be imagining the world in 2073 and discussing how different aspects of life might have changed.

Part 2: Group Formation and Topic Assignment (10 minutes)

- **Forming Groups:** Divide the class into 8 groups of 4 students.
- **Topic Assignment:** Assign each group a specific aspect of future life to focus on (e.g., transportation, education, entertainment, environment, technology, health, work, and home life).

Part 3: Group Discussion and Preparation (15 minutes)

- **Discussion:** Instruct each group to discuss their assigned topic and imagine how it might change in 50 years. Encourage creativity but also feasibility.

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Part 3: Group Discussion and Preparation (15 minutes)

- **Discussion:** Instruct each group to discuss their assigned topic and imagine how it might change in 50 years. Encourage creativity but also feasibility.
- **Role Preparation:** Each student in the group should pick a role (e.g., a future scientist, a teacher, a digital artist, an environmentalist) relevant to their topic. They will speak from this perspective.

Part 4: Role-Play Presentations (10 minutes)

- **Presentations:** Allow each group to present their vision of the future, with each student briefly explaining their role and perspective.
- **Visual Aids:** If possible, encourage the use of simple visual aids (drawings, models) they can create during the preparation time.

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Part 5: Reflection and Discussion (5 minutes)

- **Group Reflection:** After all presentations, have a brief open discussion. Ask students what they found most interesting or surprising about their peers' ideas.
- **Closing Remarks:** Conclude by highlighting the importance of imagination and critical thinking in understanding and shaping the future.

Additional Tips:

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Part 5: Reflection and Discussion (5 minutes)

- **Group Reflection:** After all presentations, have a brief open discussion. Ask students what they found most interesting or surprising about their peers' ideas.
- **Closing Remarks:** Conclude by highlighting the importance of imagination and critical thinking in understanding and shaping the future.

Additional Tips:

- **Guidance:** Offer guiding questions to stimulate their thinking (e.g., "How might we travel in 50 years?" or "What could schools look like in the future?").
- **Encouragement:** Since their level is elementary, encourage any creative idea, no matter how futuristic it may seem.
- **Time Management:** Keep a close watch on time to ensure each group gets an opportunity to present.

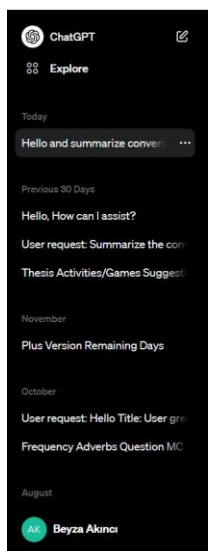
This structure should engage the students in a creative and thought-provoking activity, allowing them to explore their ideas about the future while practicing speaking and collaboration skills.

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Is this conversation helpful so far? 👍 🗣️ ✕

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* If you could have dinner with any historical figure, who would it be?

Physical Game: "Mystery Question Hat"

Objective: Students will engage in face-to-face conversations, practicing how to initiate and maintain engaging discussions.

Setup:

1. **Materials:** A hat or a bowl, slips of paper with pre-written fun and intriguing questions.
2. **Environment:** A classroom or open space where students can move around freely.

How to Play:

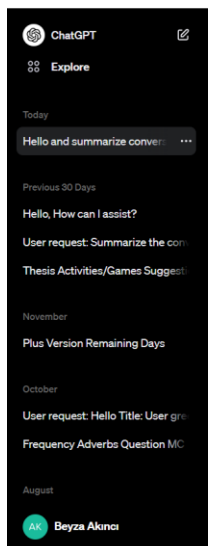
1. **Draw a Question:** Students take turns drawing a question from the hat.
2. **Find a Partner:** They then find a partner they haven't spoken with yet.
3. **Discuss:** Each pair discusses the question for about 5 minutes.
4. **Switch:** After the discussion, students find new partners and draw new questions.
5. **Debrief:** Conclude with a group discussion about their experiences and what they learned about starting conversations.



Sample Questions:

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Sample Questions:

- * What's a hobby you've always wanted to pick up but haven't yet?
- * What's the best book or movie you've experienced recently?
- * If you could travel anywhere in the world right now, where would you go?

Implementation Tips:

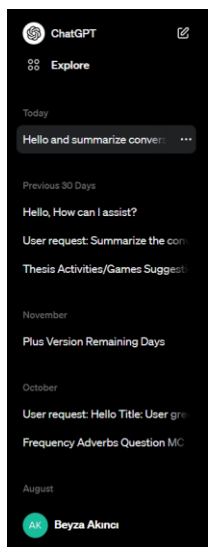
1. **Time Management:** Keep a close eye on the time to ensure everyone gets a chance to participate equally in both activities.
2. **Encourage Openness:** Remind students that the goal is to have fun and learn about each other, not to provide the 'right' answers.
3. **Active Listening:** Encourage students to practice active listening during their conversations.

These activities are designed to be engaging and interactive, helping students to practice starting conversations in a light-hearted and meaningful way. Remember to adjust the activities based on the dynamics of your class and the responses from your students. Enjoy your session!



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activity that emphasizes speaking and interaction, suitable for your students.

Role-Play Activity: "Real Estate Showdown"

Objective: Students engage in a role-play where they act as real estate agents and clients, negotiating and discussing features of their ideal living places or neighborhoods.

Setup:

1. **Materials:** Cards with different roles (e.g., real estate agent, client, inspector) and property descriptions.
2. **Environment:** Classroom arranged to simulate different 'property' stations.

How to Play:

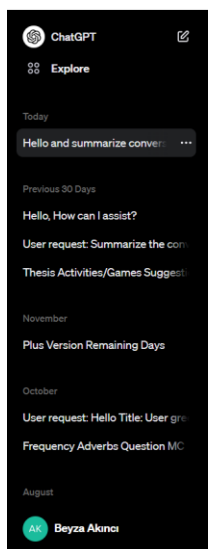
1. **Assign Roles:** Each student draws a role card. There will be real estate agents, clients, and a few inspectors or city planners.
2. **Prepare Properties:** Agents receive brief descriptions of various properties (real or imaginary), including details about the neighborhood, amenities, and unique features.
3. **Client Wishes:** Clients have a list of what they're looking for in a property or neighborhood.



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3. **Client Wishes:** Clients have a list of what they're looking for in a property or neighborhood.
4. **Negotiation and Discussion:** Agents must present their properties to the clients, tailoring their pitch to the clients' wishes. Clients ask questions and express their preferences.
5. **Inspection and Planning:** Inspectors or city planners can add challenges or additional information about the neighborhoods, encouraging problem-solving and further discussion.
6. **Switch Roles:** After a set time, students switch roles to experience different perspectives.

Enhancements:

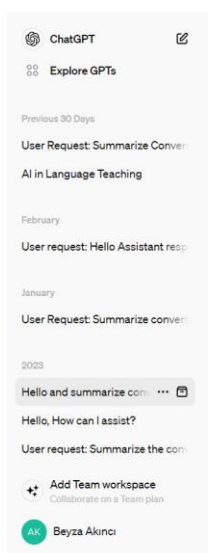
- **Time Limit:** Each interaction has a time limit to keep the activity dynamic.
- **Creative Challenges:** Add unexpected elements like budget constraints or special client needs to make the role-play more challenging.
- **Feedback Session:** Conclude with a feedback session where students reflect on their communication strategies and what they learned about discussing living areas.

Implementation Tips:



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are the same students. We have 50 mins. Please make it fun and focus on speaking. I want a role play relied on a real-life conversation

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For the topic of "asking for travel information and checking understanding," a role-play activity will be an excellent way to simulate real-life travel situations. This will allow your students to practice both asking for and giving travel information, as well as confirming understanding in a fun and interactive manner.

Role-Play Activity: "Travel Trouble"

Objective: Students practice asking for and providing travel information, and learn how to handle unexpected travel-related challenges through role-play.

Setup:

1. **Materials:** Scenario cards detailing different travel situations, props to simulate travel environments (like maps, travel brochures, tickets).
2. **Environment:** Arrange the classroom to represent different travel settings (e.g., a train station, a tourist information center, an airport).



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User request: Summarize the conversation

Add Team workspace

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a tourist information center, an airport).

How to Play:

1. **Assign Roles and Scenarios:** Students draw cards that assign them roles (e.g., traveler, ticket officer, tourist information assistant, local resident) and scenarios (e.g., lost luggage, finding a hotel, asking for directions).

2. **Role-Play Interaction:** Students interact based on their roles and scenarios. For instance, a traveler might need to ask for directions, while a local resident provides information.

3. **Problem Solving:** Some scenarios include specific problems that need to be solved, encouraging students to use their language skills creatively.

4. **Switch Roles:** After a set time, students switch roles to experience different aspects of travel-related conversations.

Enhancements:

• **Time Challenge:** Each interaction has a time limit to reflect real-life situations where travelers often have limited time.

• **Feedback Mechanism:** After each interaction, peers can provide feedback on clarity, helpfulness, and language use.

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Enhancements:

• **Time Challenge:** Each interaction has a time limit to reflect real-life situations where travelers often have limited time.

• **Feedback Mechanism:** After each interaction, peers can provide feedback on clarity, helpfulness, and language use.

• **Reflection and Discussion:** End the session with a group discussion on the challenges faced and how they overcame them through communication.

Implementation Tips:

1. **Focus on Speaking and Listening:** Encourage students to engage fully in their roles, using relevant vocabulary and phrases.

2. **Guide the Interactions:** As the instructor, you can step in to introduce new challenges or help if a group is struggling.

3. **Encourage Empathy and Creativity:** Remind students to consider the feelings and perspectives of their characters, which can lead to more authentic interactions.

This activity will not only help students practice specific language skills related to travel but also improve their overall communicative competence and confidence in handling real-life situations. Enjoy your teaching session!

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