THE FUTURE OF AI IN TURKISH LANGUAGE TEACHING FROM THE TEACHER'S PERSPECTIVE: WHAT HAPPENS IF TEACHERS TURN INTO AI?

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Abstract

In this research, it is aimed to examine the opinions of teachers about the use of AI (artificial intelligence) and AI-supported tools in Turkish language teaching. The data for this qualitative study were collected through semi-structured interviews in Northern Cyprus context. The data were divided into codes, categories were formed from the codes, and the categories were grouped under four themes. At the end of the research, it was found out that Turkish language teachers have positive opinions about the integration of AI and AI-supported tools into Turkish language teaching. The teachers believe that artificial intelligence can be used effectively in measurement and evaluation, content creation, exercise development, reinforcement and application activities. Although attitudes are mostly positive, very few teachers have experienced AI-assisted language teaching tools in practice. At the same time, a minority of the teachers expressed concerns, especially about the suitability of AI for the structure of Turkish grammar, a potential decrease in creativity and a decrease in human interaction during learning. In conclusion, suggestions were presented.

Keywords: Turkish, language teaching, teacher, artificial intelligence.

INTRODUCTION

Turkish Language Teaching and Grammar

Language teaching is a structured cognitive process that involves the use of four core language skills, incorporating communicative competence, language structures, and various related abilities. In the context of Turkish, this teaching process enables individuals to understand and use the language accurately, effectively, and in accordance with linguistic rules. It can be examined under three main categories: teaching Turkish as a first language, as a foreign language, and as a second language.

Grammar, which provides the transition of the language between generations, raises individuals' awareness, and gives them the opportunity to use it effectively in written and oral communication. As a branch of linguistics, grammar studies the sounds, forms, and sentence patterns of a language and defines the rules that organize them. It is the guardian of language order, which teaches the art of using language well, helps us to understand and explain thoughts and feelings more properly and fully (Banguoğlu, 1990; Çeçen & Aytaş, 2008; Dolunay, 2010). The stage in which organized and programmed teaching is carried out in educational environments is called grammar teaching.

In grammar instruction, students are introduced to the sound patterns, word forms, and sentence structures of a language through different strategies, with the goal of developing their ability to use the language accurately and appropriately. Effective grammar teaching allows learners to strengthen their communication skills by exploring the structure and potential of their native language. It also

equips them with the understanding of the framework of a second language and reflecting on the similarities and differences with their own (Yağmur Şahin & Abacı, 2019; Çarkıt & Kara, 2023). The main goal is to understand the target language and adapt it to real life. In this context, Sağır (2002) argues that grammar teaching should be functional and states that it should be learned in accordance with interests and needs by establishing a relationship with daily life.

Ekşi, Kır, and Benzer (2021) stated in their research that grammar teaching should be related to daily life, increasing the quantity and quality of activities, making the subjects appropriate to the student level, and giving importance to practice. The following steps are taken as a basis in the applications of the language course (Erdem & Çelik, 2011):

i. To make the student understand the rule with examples, sentences and text,
ii. Providing information about the rule and definition to the student who senses the rule,
iii. Ensuring that the student who learns the rule converts what he has learned into a skill.

It is the function of language that is important in this century, hence traditional approaches are abandoned and functional approaches are adopted based on the actual needs of individuals (Güneş, 2013; Güven, 2013; Haykır & Ağrelim, 2022). Artificial Intelligence (AI) is one of the most important tools to meet the language learning needs of these people. Tools such as ChatGPT, Grammarly facilitate grammar learning, provide feedback and correction as well as personalized learning experiences (Lalira et al., 2024). However, it is said that the artificial tools available for Turkish need to be improved in terms of supporting verbal skills such as intonation, stress and pragmatic language use (Kaleli & Özdemir, 2025).

AI in Language Education
New approaches have been added to the 21st century technologies in teaching language or language rules. AI (Artificial intelligence) has become widespread with its use in many different disciplines, and it has finally shown itself in language education.

In the literature there are many attempts to teach native and foreign languages with AI tools (Ünveren, 2024; Chen at al., 2021; Liang, 2023; Karagöl & Bilgen, 2025). Hwang et al. (2020) state that AI-supported education can be divided into four categories as intelligent tutor, intelligent tutee, intelligent learning tools or partners, and policy-making advisor applications (Chen at al., 2021, p. 4). According to Jiang (2022), there are six primary applications of AI in the EFL (English as a Foreign Language) context: automatic evaluation systems, neural machine translation tools, intelligent tutoring systems (ITSs), AI-powered chatbots, intelligent virtual environments, and affective computing integrated into ITSs.

Nowadays, it is possible to see different uses of AI such as tutoring systems, adaptive personalization systems, and measurement and evaluation etc. applications in educational settings (Chen et al., 2020; 2024; Wang et al., 2024; Lalira et al., 2024; Ünveren, 2024; Jia-Cing et al., 2023, Kannan & Munday, 2018, Şen, 2023). Most of the research studies in the literature focus on AI-supported experiments, which are conducted in foreign language teaching and English language teaching to foreigners (Kessler, 2018; Kim, Cha & Kim; 2019; Bin & Mandal; 2019; Kim, 2019; Huang, et al., 2023; Jia-Cing et al., 2023, Jiang, 2022).

In addition to pedagogical dimensions, studies on language learning in the field of AI have started to focus on many dimensions such as language acquisition, language skills, grammar, vocabulary, pronunciation, and psychological factors (motivation, etc.), (Jia-Cing et al., 2023; Karagöl & Bilgen, 2025; Şen, 2023). Despite growing interest in AI, most research to date has primarily explored its implementation in language classroom settings (Huang et al., 2023). A certain number of these studies aimed at measuring students' performance in a particular language skill and grammar. Xu et al. (2019), found that intelligent tutoring systems (ITSs) had a greater impact on students' reading comprehension than traditional instruction. There are also studies on grammar in the context of language learning with AI. While some studies explore the direct influence of grammar teaching (Lo et al., 2004; Gaithi-Al & Behforouz, 2024; Mohammed & Ja'ashan, 2024), some others examine AI's

role in functions like parsing, correcting grammatical errors (e.g., misplacements), and identifying syntactic patterns (Jia-Cing et al., 2023). For example, the research of Fang et al. (2018) was concerned with developing a content-driven method for proposing personalized grammar questions using a parse key tree. On the other hand, Lo et al. (2004) attempted to find out the effects of a hypermedia-based HELP (Hypermedia-based English Language Learning system that provides remedial training for prepositions) according to student responses. The results of this study revealed that student confidence ratings (CR) and the provision of adaptive remedial instruction had significant effects on the learning of English prepositions in hypermedia-based courses. In another study, Pandarova et al. (2019) developed an ITS for practicing English tenses.

The use of AI in language learning not only improves students' performance but also provides guidance to teachers (Agarwal & Chakraborty, 2019; Deeva et al., 2020). Therefore, it is important to identify how AI applications are perceived by teachers. Huang et al, (2023) state that one of the challenges related to the use of AI in language learning is its approval by teachers and students. In a study, it was revealed that Turkish language educators could not fully benefit from AI due to their lack of motivation (Karagöl & Bilgen, 2025).

Consequently while developments in AI in language learning continue rapidly, concerns and questions about whether AI can improve learning methodology, make education more accessible, increase teacher effectiveness, or even replace the teacher are still unanswered (Kannan & Munday, 2018). Therefore, there is a need for more research, especially on the effectiveness of AI for teachers. These statements are especially important for Turkish language teaching (Karagöl & Bilgen, 2025, 35, Akkaya & Çıvğın, 2021). Research on AI applications in the Turkish language teaching literature is increasing (Ünveren, 2024; Tekeli & Yeşil, 2024). Despite this increase, it will be important to investigate teacher perceptions about the application of AI in Turkish language teaching (Karagöl & Bilgen, 2025; Banaz & Demirel, 2024; Elmas & Yücel, 2024; Köroğlu & Kana, 2025; Banaz & Demirel, 2024).

Research Aim and Research Questions
This study seeks to explore the following research questions:
1. How do Turkish language teachers residing in Northern Cyprus perceive the integration of AI-supported tools in teaching Turkish as a first language?
2. What are their views on the use of AI-assisted tools in teaching Turkish as a foreign language?
3. What are their perspectives on employing AI-based technologies in Turkish grammar instruction?
4. How do teachers evaluate the use of AI in language education in terms of potential concerns, their experiences, and on their professional roles?

METHOD
Research Design/Model
The research employed a qualitative approach in the processes of data collection, analysis, and interpretation. According to Yıldırım and Şimşek (2013), qualitative research involves the use of methods such as observation, interviews, and document analysis, carried out in a natural setting to ensure a holistic and realistic understanding of the subject matter.

Publication Ethics
The study was approved by the Scientific Research Ethics Committee of Eastern Mediterranean University (18/03/2024/ETK00-2024-0049) and by the Directorate of the General Secondary Education Department of the Ministry of National Education of Northern Cyprus (21/05/2024/GOÖ.0.00-174/06-24/E.8255).

Participants
In this research, teacher opinions regarding the use of AI and AI-supported tools in teaching Turkish language were examined. The sample of the research is composed of Turkish language teachers who were actively working in different middle schools in Northern Cyprus during the 2024-2025 academic year. Demographic information for the participants is shown in Table 1 below.

Table 1. Demographic information about participants.

| Independent variables		n
Gender	Female	18
	Male	2
Age	< 30	1
	> 30	19

Data Collection and Analysis

A qualitative method was employed in this research, and a semi-structured interview comprising 10 questions was utilized as the data collection tool. Semi-structured interviews are flexible interviews in which the predetermined interview plan is applied exactly to the participant; in addition, new questions can be asked (Karasar, 2015). The questions are in a structure suitable for open-ended interpretation, and they were created by the researchers after reviewing the relevant literature. The interview was piloted by submitting it to three experts in the field and asking them to complete it and give feedback on it. This study, which was carried out with Turkish language teachers in a selected region, employed purposive sampling. Purposive sampling, an improbable sampling technique, is a type of sampling in which researchers deliberately select participants based on specific characteristics or criteria relevant to the research question (Syatriana & Jumiaty, 2025). In the present study, the researchers carried out the interviews in person. The data obtained during the interviews were recorded and then transcribed. "Researchers record the information in the interview by taking video footage, audio recording, or handwritten notes" (Creswell, 2016, p. 194).

The interviews were conducted face-to-face with teachers. Each interview lasted 15 minutes on average. Furthermore, the research findings were supported by directly quoting the teachers' responses to the interview questions. The data collected through the interviews were analyzed using the descriptive analysis method. In this approach, the data are organized and interpreted around pre-established themes, with frequent use of direct quotes to vividly convey the perspectives of participants (Yıldırım & Şimşek, 2013). Each participant was assigned a unique code labeled as "PC" (Participant Code).

RESULTS

The results obtained from the semi-structured interviews are presented in this section of the article. In this study, firstly, the data were divided into codes, categories were formed from the codes, and the categories were grouped under four themes.
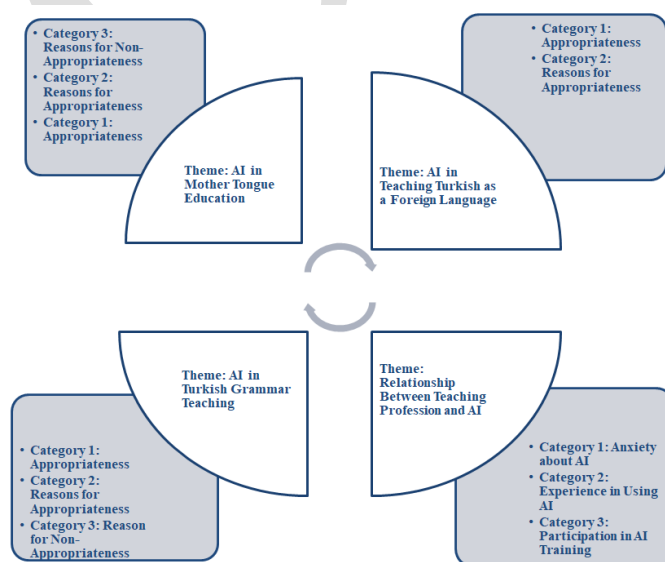
Figure1. Theme and category scheme.

The following are the results obtained from the first theme:

Theme: AI in mother tongue education

During the interviews, the teachers were asked questions about the use of AI in teaching Turkish as a native language. The teachers' answers to this question regarding the use of AI in teaching Turkish as a mother tongue are presented in Table 2, classified based on suitability and reasons.

Table 2. The suitability between AI and mother tongue teaching.

Codes	PC
AI is suitable for mother tongue teaching	P1, P5, P6, P7, P8, P9, P10, P11, P13, P14, P15, P18
AI is not suitable for mother tongue teaching	P4, P12, P19, P20
AI is partially suitable for mother tongue teaching	P2, P3, P16, P17

According to the data in Table 2, 12 participants found the use of AI in mother tongue teaching suitable. Four participants expressed a negative opinion, while another four provided a neutral comment within the framework of certain conditions. In this category the highest number of codes pertains to the appropriateness of its use.

The opinions of the teachers on the subject are as follows:

> P13: '…Yes, its use is definitely possible. Artificial intelligence can synthesize a lot of information at the same time.'

> P11: '…I think artificial intelligence can be used in mother tongue teaching. It can perform analysis and synthesis in composition writing, idea production, written expression, book summary creation.'

> P12: '…No, it's not possible because the language is Turkish.'

> P20: '…I do not find it appropriate to use Turkish as a mother tongue in teaching because I think it will dull creativity and accustom to readiness.'

> P17: '…I think it may be partially possible. Course contents can be provided for the student's learning needs.'

It is seen that teachers have diverse perspectives regarding the use of AI in mother tongue education. While some participants (P13, P11) emphasize AI's capacity for information synthesis and support in composition and idea development, others (P12, P20) express concerns that AI might negatively affect students' creativity and readiness skills. The view of P17, who considers AI partially appropriate depending on the student's needs, reflects a conditional and flexible approach. These opinions indicate that teachers do not evaluate AI as a uniformly applicable tool but rather assess its appropriateness based on specific pedagogical goals and student profiles. Teachers who view AI as supportive generally focus on technical aspects of language use, while those who are skeptical emphasize deeper cognitive skills such as creativity. This diversity highlights the importance of teacher awareness and pedagogical reasoning in integrating AI into language teaching.

Table 3 presents the reasons for whether AI is suitable for mother tongue teaching. While six codes relate to the appropriateness of using artificial intelligence in mother tongue teaching, four codes highlight its inappropriateness. The category with the highest number of codes pertains to the appropriateness of its use.

Table 3. The case of appropriateness and inappropriateness of the use of AI in mother tongue teaching.

Codes for non-appropriateness	PC	Codes for appropriateness	PC
Insufficient in theory	P4	Sufficient in practice	P10
Contrary to the structure of Turkish	P12	Assistant resource	P1, P6, P8, P15
Contrary to the ability of creative thinking	P20	Easy teaching of concrete concepts	P5
Eliminates interaction	P19	Exercise development	P7, P13
		Essay writing	P11, P14
		Teaching vocabulary	P9, P18

The opinions of the teachers on the subject are as follows:

P18: '…Yes, It can be used to learn the meaning of a word.'

P5: '…It will help in acquiring the subtleties of language and abstract concepts.'

P19: '…It is not possible because I think it will not provide active interaction.'

P4: '…No, it will be insufficient in the theory of grammar.'

The teachers' opinions reflect both supportive and critical perspectives on the role of AI in language teaching. Participants like P18 and P5 emphasize AI's practical contributions, such as facilitating vocabulary acquisition and supporting the understanding of abstract concepts. On the other hand, P19 and P4 highlight AI's limitations, especially in providing interactive learning environments and addressing theoretical aspects of grammar. These differing views suggest that while AI can serve as a useful complementary tool for enhancing certain language skills, its limitations in fostering interaction and deep grammatical understanding should not be overlooked.

Theme: AI in teaching Turkish as a foreign language
During the interviews, the teachers were asked a question about the use of AI in teaching Turkish as a foreign language. The teachers' answers to this question regarding the use of AI in teaching Turkish as a foreign language are presented in Table 4, categorized based on suitability and reasons.

Table 4. The use of AI in teaching Turkish as a foreign language.

Codes	PC
AI is suitable for teaching Turkish as a foreign language	P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P11, P12, P13, P14, P15, P16, P17, P18, P19, P20
AI is not suitable for teaching Turkish as a foreign language	-

According to the data in Table 4, all the participants found the use of AI in teaching Turkish as a foreign language suitable. There were no participants who expressed a negative opinion. The quotations of the teachers on the subject are as follows:

P3: '…Yes, it can be used because it allows mutual conversation.'

P17: '…I say yes because it will offer different learning materials.'

It is understood that teachers view AI as a highly suitable tool for teaching Turkish as a foreign language. Participants (P3, P17) emphasize AI's potential in providing interactive communication opportunities and offering diverse instructional materials, which are essential in foreign language learning. The absence of negative opinions indicates that the teachers perceive AI as an effective way to overcome certain challenges in foreign language instruction, such as limited exposure and practice opportunities. This positive perspective also shows that the teachers associate AI with flexibility and resource diversity in the foreign language learning process.

Table 5. The case of appropriateness of the use of AI in teaching Turkish as a foreign language.

Codes for appropriateness	PC
Using mutual conversation	P3
Teaching idioms and proverbs	P5
Easy teaching of concrete concepts	P10
Using applications	P2, P4, P9, P11
Content specific to level differences	P13, P17
Use in translation	P15, P16, P18, P19, P20
Accepted as appropriate without reason	P1, P6, P7, P8, P12, P14

Table 5 presents the reasons for whether AI is suitable for foreign language teaching. The seven codes are related to the appropriateness of using AI in foreign language teaching. The number of participants who found it suitable without providing any reason is higher.

Theme: AI in Turkish grammar teaching

In another question during the interview, the teachers were asked to express their opinions re the use of AI in Turkish grammar teaching. The two categories, suitability and justifications, are presented in Table 6 below.

Table 6. The use of AI in Turkish grammar teaching.

Codes	PC
AI is suitable for Turkish grammar teaching	P1, P2, P4, P5, P6, P7, P8, P9, P10, P11, P12, P13, P14, P15, P16, P17, P18, P19, P20
AI is not suitable for Turkish grammar teaching	P3

As seen in Table 6, all participants except for one found the use of AI in Turkish grammar teaching suitable for various reasons. The quotations of the teachers on the subject are as follows:

P1: '…I think it can be used at every stage of the lesson. It presents a lecture, prepares questions, makes evaluations, analyzes in line with errors.'

P3: '…I don't think grammar can be used effectively in the learning process. I do not believe that artificial intelligence can provide accurate information.'

It is observed that most teachers consider AI appropriate for teaching Turkish grammar, highlighting its practicality in lesson delivery, assessment, and error analysis, as stated by P1. This shows that the teachers focus on AI's potential to streamline instructional processes and provide instant feedback. However, the critical perspective of P3, who questions AI's accuracy and effectiveness in grammar instruction, points to concerns about content reliability and the need for human oversight.

Table 7. The case of appropriateness and inappropriateness of the use of AI in Turkish grammar teaching.

Codes for non-appropriateness	PC	Codes for appropriateness	PC
Incompatibility with the grammar of Turkish	P3	Measurement and evaluation	P1, P2, P4, P5, P9, P10, P14, P15, P17, P19
		Repetition of the topic	P13, P16, P18
		Creating an exercise and ideas	P1, P11
		Post-learning reinforcement	P6, P10
		Shortening the educational process	P20
		Accepted as appropriate without reason	P7, P8, P12

As can be seen in Table 7, the use of AI in Turkish grammar teaching was deemed unsuitable due to the unique grammatical structure of Turkish. However, it was considered suitable for reasons such as assessment and evaluation, content creation, and reinforcement teaching.

The opinions of the teachers on the subject are as follows:

P5: '…It can be used effectively in the measurement and evaluation process.'

P5 highlights AI's effectiveness in measurement and evaluation processes, indicating its potential for providing timely and objective feedback.

P20: '…Yes, it can shorten the learning process.'

P20 focuses on AI's role in accelerating the learning process, suggesting that AI applications may help simplify and streamline grammar instruction.

P10: '…Yes, it can be used. More to consolidate learning in the learning process, to make it concrete'.

Similarly, P10 emphasizes AI's contribution to reinforcing learned content and making abstract grammar rules more concrete for students.

Theme: The relationship between the teaching profession and artificial intelligence

Towards the end of the interview, the participants were asked a question regarding the relationship between the teaching profession and artificial intelligence in Turkish language education. Based on the responses obtained from the participants, concerns about artificial intelligence were first categorized into two as shown in Table 8 below.

Table 8. Anxiety about using AI working as a Turkish teacher**.**

Codes	PC
Not worried	P2, P3, P4, P5, P6, P7, P8, P9, P11, P14, P15, P16, P17, P18, P19
Worried	P1, P10, P12, P13, P20

As can be seen in Table 8, the number of teachers who expressed concerns about AI is lower than those who did not. Only five participants expressed concern that AI would take over the profession. The opinions of the teachers on the subject are as follows:

> P15: '…No, I'm not worried and I find the education-training model that is being maintained at the moment too primitive.'

Participant P15's statement reflects a view that current educational practices have significant room for improvement and that AI's current role is still limited.

> P2: '…I don't have any concerns because I know that artificial intelligence is not perfect at this stage.'

Similarly, P2's comment shows an awareness of AI's current limitations. This realistic appraisal suggests that some teachers critically evaluate AI's capabilities and therefore do not feel threatened, which is important for balanced integration of technology into teaching.

> P14: '…No, there will not be an area that artificial intelligence cannot reach at every point in the years to come.' In contrast, P14's view expresses an acknowledgment of AI's rapid and far-reaching growth.

This perspective reveals a cautious anticipation of future challenges, highlighting the need for ongoing teacher preparedness and adaptation in the face of technological advancement.

> P10: '…Yes, I am worried because artificial intelligence like the Internet, the phone, attracts the attention of students more.'

> P13: '…Yes, it is worrying that the teacher will be replaced. The lack of emotion in artificial intelligence will cause many problems in the educational process in the future.'

Teachers P10 and P13 bring attention to more affective and practical concerns. These concerns underscore the importance of maintaining a human-centered approach in education, where technology supports rather than supplants teacher-student interaction.

> P1: '…Yes, I'm worried. I think that a defense and control system such as human conscience control should be applied to an artificial intelligence system. Otherwise, malicious people can use it for their malicious intentions.'

This indicates a teacher's awareness of potential risks and the necessity for responsible governance in deploying AI in educational contexts.

Table 9. Experience of using AI in Turkish teaching.

Codes	PC
Experienced	P10
Not experienced	P1, P2, P3, P4, P5, P6, P7, P8, P9, P11, P12, P13, P14, P15, P16, P17, P18, P19, P20

Table 9 presents findings on whether the participants have used AI-based applications in the classroom in any form. Although the number of participants who do not have concerns about AI is high, the number of those who have experienced it in the classroom is extremely low.

The quotations of the teachers on the subject are as follows:

> P10: '…Yes, I have had experience. I have set my own rules about the grammar topics I have taught, I have created events and games in my own way. It attracted a lot of attention from the students.'

This teacher's initiative in customizing AI applications to suit specific grammar lessons and designing interactive activities suggests a process-oriented mindset focused on student engagement and personalized learning. P10's experience shows that when teachers take ownership of AI integration by adapting the tools to their pedagogical goals, AI can become a valuable resource that enhances motivation and participation. However, the fact that only a few teachers share such experiences points to potential barriers such as lack of training, resources, or confidence in using AI technologies.

Table 10. The idea of participating in training on the use of AI in Turkish teaching.

Codes	PC
Consider	P1, P2, P4, P5, P6, P8, P9, P10, P11, P12, P13, P14, P15, P16, P17, P18, P20
Not consider	P3, P7, P19

Table 10 presents the participants who expressed their satisfaction or preference for attending in-service training on AI and language teaching. It is observed that the majority of the participants responded positively to this question.

The opinions of the teachers on the subject are as follows:

> P17: '…Yes, I'll think about it. Apart from content narration, I would like to be able to use artificial intelligence for events and different level groups.'

P17's statement reflects a forward-thinking and differentiated approach. The teacher aims not only to deliver content but also to utilize AI to create interactive, varied learning experiences tailored to diverse student needs, indicating an instructional focus on inclusivity and engagement.

> P4: '…Yes, I'll think about it. I would like to improve myself at every point where I can help students by using technology.'

P4's positive comment emphasizes continuous self-improvement and student-centeredness. This suggests that some teachers view AI training as a means to enhance their pedagogical skills and better support student learning through technology.

> P18: '…Yes, I'll consider joining. Because it is essential to comply with the developing and renewed era.'

P18's remark demonstrates an understanding of the necessity to keep pace with technological advances, highlighting adaptability as a key professional competence in contemporary education.

> P19: '…No, I won't think about it. I am in favor of the teaching that we make eye contact.'

> P4: '…No, I don't think it's so necessary to use artificial intelligence.'

These views (P19 and P4) underscore the value placed on human interaction and traditional pedagogical methods, reminding us that emotional connection and direct communication remain central to education for some teachers.
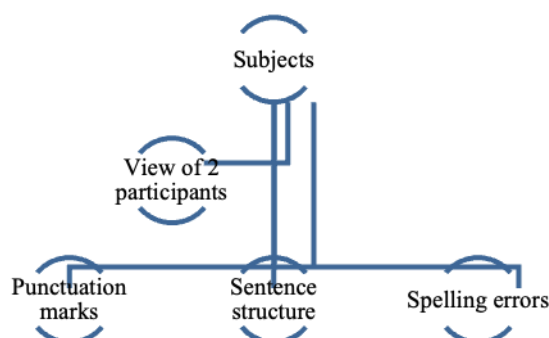
Figure 2. Suitable subjects for the use of AI in Turkish grammar.

Figure 2 shows that the grammar topics where AI can be used in mother tongue Turkish teaching include 'punctuation marks, sentence structure, and spelling errors'. Only two participants expressed their views on this issue.

DISCUSSION, CONCLUSION, and SUGGESTIONS

AI has become a part of life in many areas. One of these areas is language teaching. AI applications in both native and foreign language teaching have started to spread rapidly. In this context, teachers who are practitioners of education should get acquainted with AI. The opinions of teachers on this issue are important for the successful integration of AI applications into language teaching.

This study investigated Turkish language teachers' opinions on the use of AI in Turkish L1 instruction. The findings of the study revealed that the majority of the teachers viewed AI integration positively, particularly in areas such as measurement and evaluation, content creation, exercise development, and reinforcement teaching. Although some participants raised concerns regarding the compatibility of AI with the unique structure of Turkish language and its potential impact on creativity and human interaction, these reservations were relatively limited in number. Similar results have been found in the literature, and it has been stated that very few teachers have the same concerns when teaching Turkish to foreigners (Çangal, Çelik, & Başar, 2025). Karagöl and Bilgen (2025) found that AI provides benefits in content production, course material preparation, reducing teachers' workload in teaching Turkish as a native language, but teachers cannot fully benefit from this technology due to their lack of motivation. However, the participants have concerns about ethics, promoting simplicity and information reliability.

The acceptance of AI was even more pronounced in the context of teaching Turkish as a foreign language, where all participants acknowledged its usefulness, citing benefits such as facilitating mutual conversation, offering content for various proficiency levels, and supporting translation activities. Nowadays, many applications related to the use of AI in foreign language teaching – especially English teaching- have been developed (Jia-Cing, 2023; Kanan & Munday, 2018; Mohammed & Ja'ashan, 2024, Winaitham, 2022). The research results show that AI has various positive contributions to foreign language teaching. Natural language processing (NLP), machine learning, and deep learning applications make a great contribution to English language teaching (Lalira et al., 2024). Diversity and complexity in English language learning and teaching, including the levels of English teachers and students, could be the basis of the language industry in the future according to Winaitham (2022). It is stated that AI provides powerful tools to improve personalized learning experiences in foreign language learning, increase student participation, provide feedback and correction, improve teaching methods for teachers, monitor student development, and facilitate administrative responsibilities (Agrawal, 2024). In a study conducted in Indonesia, EFL teachers at a university stated that AI is especially effective in developing students' skills of structuring their ideas more effectively (Lalira et al., 2024). Kardoğan and Kardaş (2025, p. 161) argued that the use of artificial intelligence in educational activities can provide positive contributions to educators.

In some of the studies on Turkish, the purpose of AI is to produce texts according to different levels (Tekeli & Yeşil, 2024; Kastı & Can, 2024). It has been concluded that AI increases the motivation of the student in teaching Turkish to foreigners, contributes to individual learning, and supports the development of language skills. Trainers have stated that they usually use AI tools to develop materials that offer interactive content and to create text, image and even audio files (Çangal, Çelik, & Başar, 2025). Zileli (2023) investigated the applicability of CHATGPT in teaching Turkish to foreigners in subject areas such as dialogue formation, the meaning of words, sentences and texts, translation and feedback, pronunciation, narration with examples and preparation of exercises. In grammar teaching specifically, most participants affirmed AI's potential for improving learning processes through assessment, topic reinforcement, and shortening the educational timeline. When examining the views on the use of AI tools for learning Turkish, positive effects are highlighted in terms of learning words and meanings, learning speed, learning by gamification, learning grammar rules and practice (Küçük & Solak, 2025; p. 15).

In the studies on the effect of AI on grammar teaching, it has been revealed that teaching using AI tools has an effect on student performance (Kim, 2019; Chang et al., 2021; Schmidt-Fajlik, 2023). In these studies, it has been concluded that AI tools, especially Grammarly and ChatGPT, improve grammar ability in various academic programs (Lalira, et al., 2024, Fitria, 2022; Shloul et al., 2024). In another study that measures the effectiveness of interactive Chatbox application in grammar teaching, the findings were found out to be in favor of the experimental group (Kim, 2019). Also, Fitria (2022) revealed that Grammarly application can be used to evaluate students' writings in terms of both grammatical and mechanical (spelling, punctuation and capitalization) errors. Intelligent teaching systems can identify grammatical errors, help students learn the rules, and facilitate the evaluation process of teachers (Ni & Cheung, 2023; Yeşilyurt, 2023). A study conducted in Saudi Arabia showed that the feedback of AI is open, constructive and very useful for grammar learning. In addition, the application enabled students to consolidate their learning, increased their participation levels and motivation (Winaitham, 2022). In a study conducted with Turkish teacher candidates, similar results were reached to those in the world. Although teacher candidates state that AI can lead to incorrect learning and weaken the language-culture relationship, they believe that it would facilitate grammar teaching, contribute to material preparation, and make learning processes interesting (Köroğlu & Kana, 2025).

Despite the generally positive attitudes, the present study also highlighted a gap between perceptions and actual classroom practices, as only a small number of teachers had practical exposure to using AI tools. Nevertheless, a significant majority expressed interest in receiving in-service training on AI integration into language education, signaling a readiness to adapt to technological advancements. In a study conducted on teaching Turkish to foreigners, in contrast to this study, it was found that more than half of the teachers used AI tools. It is stated that the reason for not using AI in the mentioned study is due to lack of information, as in this study (Çangal et al., 2025). At this point, providing in-service training to teachers on AI will increase usage. In a study where educational opinions about the use of AI in Turkish teaching were taken, it is pointed that the use of AI has both potentials and limitations. It has been stated that AI will contribute to the development of language skills and can enrich individualized learning (Karagöl & Bilgen, 2025). However, similar concerns to those of some teachers have emerged in studies conducted on academicians, teachers and teacher candidates. Serious concerns have been expressed on issues such that AI can lead to laziness and create ethical problems, lack of emotions, and lead to incorrect learning (Karagöl & Bilgen, 2025; Köroğlu & Kana, 2015). In research, it has been found that teachers cannot make full use of this technology due to their lack of motivation, so there is a need for in-service training (Karagöl & Bilgen, 2025). Overall, the findings suggest that while Turkish language teachers recognize the transformative potential of AI in grammar and Turkish teaching, successful implementation will require addressing concerns related to linguistic nuances and the preservation of critical human-centered educational values. Future research could further explore long-term effects of AI use on language acquisition and teacher-student interaction dynamics in Turkish language education.

In the context of this study, the results can be summarized as follows:

- The most Turkish language teachers have positive views about the integration of AI and AI-supported tools in grammar teaching.

- Teachers believe that AI can be effectively used in measurement and evaluation, content creation, developing exercises, reinforcement and practice activities.

- A minority of teachers expressed concerns, especially about AI's compatibility with Turkish grammar structure, potential reduction in creativity, and decrease in human interaction during learning.

- All the participants agreed that AI is very beneficial in teaching Turkish as a foreign language, highlighting points such as: support for speaking and conversation practice, content provision across different proficiency levels, and assistance in translation tasks.

- In grammar instruction, teachers emphasized that AI could enhance the evaluation of student learning, strengthen topic reinforcement, shorten the time needed for effective grammar teaching.

- Although attitudes are mostly positive, few teachers have actually experienced AI-supported grammar teaching tools in practice.

- The majority of teachers expressed a strong desire to receive in-service training about using AI in language education.

- There are also those who have concerns about AI among teachers and are still likely to use AI.

Suggestions

Systematic and practical in-service training programs should be developed to increase Turkish language teachers' competence and confidence in using AI technologies in grammar teaching. Moreover, AI-supported educational tools should be designed with sensitivity to the unique structural and morphological characteristics of the Turkish language to ensure linguistic accuracy and educational effectiveness. Also, educational practices should emphasize a balanced integration of AI tools with teacher-student interaction, in order to preserve creativity, critical thinking, and interpersonal communication skills. Finally, further longitudinal studies should be conducted to investigate long-term effects of AI use on students' grammar proficiency, motivation, and overall language competence. The research can also be carried out with different sample groups.

Ethics and Conflict of Interest

The research was approved by the Scientific Research Ethics Committee of Eastern Mediterranean University (18/03/2024/ETK00-2024-0049) and by the Directorate of the General Secondary Education Department of the Ministry of National Education of Northern Cyprus (21/05/2024/GOÖ.0.00-174/06-24/E.8255). The authors declare that they acted in accordance with ethical rules in all processes of the research. The authors declare that they have no conflict of interest.

Author Contribution

All authors contributed equally to the research.

Data availability

The data that support the findings of this study are available on request from the corresponding author.

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