Research Article

Teachers' perspectives on artificial intelligence applications in Turkish language teaching

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This phenomenological study aims to investigate the views of Turkish course teachers on the use of artificial intelligence (AI). The research is shaped around the role of AI in education, the challenges faced by teachers while using AI, its effects on student motivation, ethical issues around AI, and teachers' predictions regarding AI's role in education in the future. The study employs a phenomenological approach, and the participants were determined through criterion sampling. A total of 12 Turkish teachers were interviewed, and the data were collected in written form via a semi-structured interview form. The data were then analysed using thematic analysis, which yielded five main themes and three sub-themes. The results show that teachers are positive about the potential of AI to increase interaction and creativity in the classroom. However, challenges such as lack of training, inadequate technological infrastructure and reliability issues are also identified. The positive impact of AI applications on student motivation makes the classroom more fun and contributes to the development of students' independent learning skills. Ethical issues, privacy and data protection are highlighted by teachers. Expectations for the future are that the role of AI in education will increase and that educational policies and curricula should be updated. Therefore, in order to realise the potential of AI in education, teacher training, strengthening the technological infrastructure and ethical issues need to be addressed.

Keywords: Artificial intelligence, Turkish language teaching, student motivation, ethical problems

1. Introduction

Since the early 21st century, the rapid development of technology has led to radical changes in the field of education, with one of the most significant of these being the integration of AI into educational processes. The potential of AI to offer personalised experiences in education by reshaping learning and teaching methods is widely acknowledged, yet the use of AI in education also brings some challenges. Key considerations include issues such as data privacy and security, ethical implications, and the redefinition of the role of educators.

The field of AI encompasses the development of systems and technologies that emulate human-like cognitive and learning capabilities. AI can be regarded as a technology that facilitates the development of computers capable of outperforming humans in problem-solving tasks (Khalil, 2024). The concept of AI gained momentum in the 1950s with the emergence of innovative ideas and theoretical studies. Alan Turing's 'Turing Test' questioned whether machines could think and marked one of the first systematic approaches to understanding machine intelligence (Turing, 1950). Over time, AI evolved from logic and problem-solving to more complex areas like machine learning, deep learning, and natural language processing. John McCarthy's usage of the term 'artificial intelligence' in the 1960s was significant in shaping the field (LeCun et al., 2015; McCarthy, 1959; Russell & Norvig, 2016).

Recent advancements in AI have precipitated revolutionary changes in a plethora of sectors, including but not limited to health, finance, automotive and entertainment. A notable example of this phenomenon is the contributions made by Google's AlphaFold project to the realm of biological research, with its remarkable ability to predict the folding of proteins (Jumper et al., 2021). Likewise, the field of natural language processing has witnessed a paradigm shift with the

advent of language models such as GPT-3 developed by OpenAI, which have ushered in novel opportunities in text generation, translation and dialogue systems (Brown et al., 2020). It can be posited that the implementation of AI applications across diverse domains, including medicine, production, digital gaming, communication technology, energy, economy, and logistics, has the potential to enhance both the quality of life and the ease with which individuals carry out their daily activities (Işler & Kılıç, 2021). The utilisation of AI applications has become imperative in the development of novel products across diverse domains. This phenomenon can be regarded as indicative of the potential for computers and machines to attain human-level intelligence standards, thereby assuming a significant role in people's daily lives (Russell & Norvig, 2016). While these advancements in AI technologies are regarded as beneficial in terms of enhancing quality of life and introducing novel elements, they have concomitantly given rise to ethical and social responsibility concerns. In 2021, the European Commission made significant progress in the direction of responsible development of this technology by proposing recommendations for the regulation of AI applications (European Commission, 2021). Furthermore, studies on the transparency and accountability of AI systems have contributed to a more profound understanding of the impact of these technologies on society (Jobin et al., 2019).

The historical evolution of AI has been shaped by the interplay of numerous academic disciplines and has materialised in studies that will culminate in the emergence of machines with human-like intelligence. In the forthcoming years, the repercussions of developments in this domain on technological and social life will become more apparent.

1.1. Artificial Intelligence in Education

In the contemporary period, there has been an observable advancement of AI technologies within the domain of education and training, accompanied by the emergence of diverse applications in various fields. The innovations that are set to materialise as a consequence of these technologies are projected to bring about significant advancements in education and training processes, as well as in the organisation of educational environments. Recently, the term 'school' has begun to be defined as a place where students and teachers convene physically and virtually to engage in teaching and learning activities (Timms, 2016). The present situation has rendered it inevitable that computer technologies, and by extension AI technologies, should become an integral part of education and training processes. The incorporation of AI applications into the educational sector has the potential to enhance the effectiveness and personalisation of teaching processes, thereby offering opportunities to increase student achievement and enrich learning experiences. The role of AI in education is particularly evident in domains such as learning analytics, intelligent teaching systems and automatic assessment. It can be posited that the utilisation of AI applications in the domain of education possesses the capacity to enhance students' learning processes (Işler & Kılıç, 2021). The utilisation of AI technologies as a tool for the design of all course contents, particularly those encompassing a diverse array of subjects such as social studies, has the potential to foster enhanced interactivity and creativity (Karakuş, 2023).

Luckin (2016) emphasises the potential of AI to transform learning processes, suggesting that educational technologies incorporating AI can more effectively cater to students' diverse needs by providing personalised learning experiences. In this context, the utilisation of AI applications has been shown to enhance the efficacy of the learning process by offering content that is tailored to students' individual learning styles and paces (Baker & Inventado, 2014). It has been posited that the provision of transparency in the decision-making processes of AI is of critical importance for the promotion of equity in education (Williamson & Piattoeva, 2020). Furthermore, AI-supported systems analyse students' strengths and weaknesses, thereby enabling teachers to develop appropriate intervention strategies (Lakshmi et al., 2023).

Another significant benefit of AI in education is that it reduces teachers' workload, enabling them to concentrate more on teaching processes. Teachers can analyse student performances through various AI-supported systems and develop intervention strategies accordingly (Kukulska-Hulme, 2020). This can be viewed as a situation that will strengthen teacher-student interaction

and increase efficiency in education. Nonetheless, the integration of AI in education is accompanied by a number of challenges, as well as numerous positive aspects. In this context, it is essential to undertake a thorough evaluation of AI applications in relation to ethics, social responsibility, privacy and accessibility. In conclusion, it is evident that AI has the potential to transform learning processes and ensure equality in education by providing innovative solutions in education. However, it is imperative to consider the ethical and social dimensions for the effective use of AI in education.

1.2. Artificial Intelligence in Turkish Education

A review of the extant literature reveals a need for technological tools in the field of social sciences, which is more pronounced than in other fields. From the perspective of language learning, the use of teaching materials incorporating sounds and images is necessary due to the nature of the lesson. The constant search for new methods of language learning necessitates the use of technological tools in this field (Kartal, 2005). The most recent and efficacious of these technological tools are those supported by AI. The integration of AI technologies has the potential to enhance the interactive and creative nature of teaching processes, particularly in courses encompassing a diverse range of subjects, such as social studies (Karakuş, 2023). As AI applications generate demand for advanced education in associated domains (Yalabik, 1990), there is a necessity to enhance awareness of artificial application methodologies within the context of Turkish language education (Içen, 2022). The potential of AI technologies in language learning has been demonstrated through their capacity to facilitate language acquisition through visual exercises and non-memorisation approaches (Ermağan & Ermağan, 2022). However, a review of studies conducted on teachers in this field reveals that pre-service teachers in Turkey have mixed feelings about AI, expressing both positive and negative sentiments, and acknowledging the potential benefits and risks of AI in education (Haseski, 2019). Moreover, the Turkish government has prepared policy documents emphasising the role of colleges in AI workforce development (İçen, 2022). Despite certain deficiencies, Turkey has initiated the development of AI-based language learning programmes, particularly in the context of Turkish language education (Ermağan & Ermağan, 2022). These studies underscore the mounting significance of AI in Turkish language education and underscore the necessity for additional research and implementation strategies in this domain. In the imminent future, the integration of AI technologies into education will necessitate Turkish teachers to maintain familiarity with this process, as is already the case with their international counterparts. This predicament necessitates an investigation into Turkish teachers' perspectives, needs and concerns regarding AI. Consequently, this study is based on the opinions of Turkish teachers regarding the integration of AI in Turkish language education. The aim of the study is to ascertain their perspectives on the utilisation of AI tools in the classroom, along with their needs and concerns in this context.

2. Method

2.1. Research Design

In this study, Creswell's (2012) phenomenological design was utilised to ascertain Turkish teachers' perspectives on the integration of AI in Turkish language instruction through the analysis of specific experiences. This design ensured the collection of diverse experiences among Turkish teachers regarding AI. The criterion sampling method was employed to select the participants of the study. The objective of criterion sampling is to examine and evaluate cases that meet specific importance criteria (Moser & Korstjens, 2017). Creswell (2013) asserts the paramount importance of ensuring that all participants possess experience with the phenomenon under study. To this end, the criterion sampling method was employed, with samples selected based on the criteria of volunteering, secondary school teaching experience, and utilisation of AI tools.

2.2. Participants

With regard to the sample size in phenomenological research, Creswell (2012) emphasises the necessity of determining the requisite sample size for a study. In the context of phenomenological research, the number of participants can range from two to 25. In this study, data were collected from a total of 12 teachers actively working in schools affiliated with the Ministry of National Education.

In the semi-structured interview form, teachers were randomly given code names and preliminary information such as *place of duty, gender, education level, experience, class levels* and *computer literacy* were also included in the interview form. Considering this preliminary information, the profile of the participants is as presented in Table 1.

Table 1
Participant Teacher Profile

Name	Gender	Education Status	Teaching Experience (Years)	Class Levels (Grade)	Computer Literacy
Ahmet	Male	Master's	16	5, 8	Advanced
Cemre	Female	Bachelor	12	6, 8	Average
Elif	Female	Bachelor	9	5, 8	Advanced
Çiçek	Female	Bachelor	19	5, 6, 8	Average
Demir	Male	Master's	10	5, 6, 7, 8	Average
Ergun	Male	Master's	21	5	Average
Erkan	Male	Bachelor	22	5	Average
Arda	Male	PhD	12	5	Advanced
Kağan	Male	Bachelor	17	5, 7, 8	Advanced
Esra	Female	Master's	10	5, 6	Average
Selim	Male	Bachelor	19	5, 6, 7, 8	Limited
Hande	Female	Master's	2	5,6	Average

2.3. Data Collection

A semi-structured interview form consisting of five questions was utilised during data collection. The questions in the form were designed based on the opinions of two academicians who are experts in the field of Turkish education. The teachers who were determined according to the criteria were asked to fill in the semi-structured interview forms and the records were taken in written form. While filling out the form, offices or suitable working areas in the institution where silence could be ensured were selected. While paying attention to give enough time for the Turkish teachers to respond sincerely, we tried to choose hours that did not conflict with the Turkish teachers' class hours and that were convenient for them. Each interview lasted between 20 and 25 minutes on average. Moustakas (1994) asserts the significance of comprehending the dynamics underlying the participant's experience. Furthermore, he advises that to capture the essence of an overall phenomenological enquiry, researchers should endeavour to separate themselves from the subject they are researching. He asserts that researchers must discard any preconceived notions or biases they may hold regarding the phenomena under investigation. For this reason, care was taken not to give any guidance while taking the opinions of the participant teachers.

2.4. Data Analysis

Thematic analysis, a qualitative data analysis method that involves reading a set of data and looking for patterns in the meaning of the data to find themes, was used to analyse the data. According to Braun and Clarke (2006), thematic analysis involves systematically examining the data and extracting meaningful themes.

The data collected during the research process should be transcribed verbatim, i.e. written down exactly as the participant says it, without any alterations (Miles et al., 2013). For this reason, the verbatim transcription of the participants' interview forms was prepared, ensuring that no

changes were made to the words spoken. Alase (2017) advises researchers to initiate the data coding process by reading the interview transcripts several times. He recommends reading the transcripts at least three times to gain an understanding of the participants' verbal contributions and to facilitate the identification of themes. The data obtained from the interview forms were read three times, and the opinions were classified. The first codes were then created from the classified data, and according to these codes, main themes and sub-themes were identified and defined and named.

3. Findings and Discussion

Thematic analysis of the interview data yielded five overarching themes: *the role of artificial intelligence in education, challenges and barriers, artificial intelligence and student motivation, ethical and social Dynamics* and *future expectations* (see Figure 1).

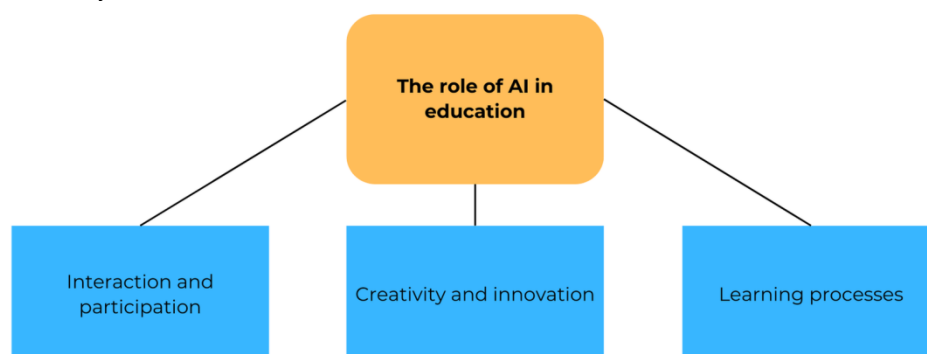Figure 1
Main Themes
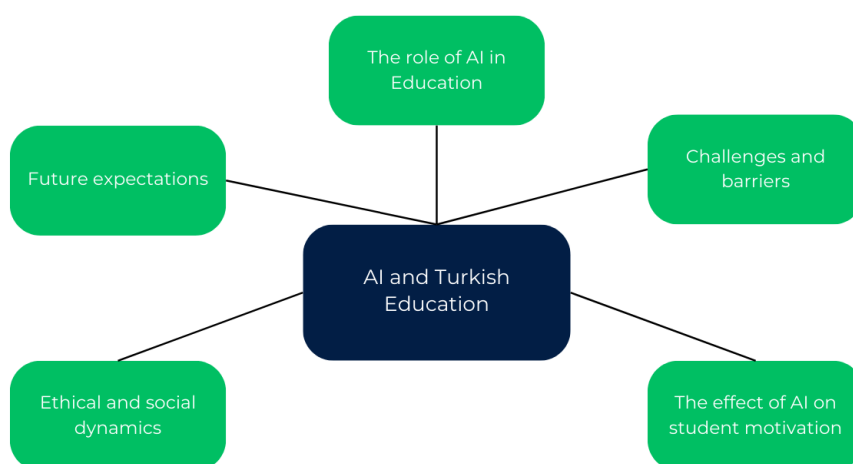
3.1. The Role of Artificial Intelligence in Education

As outlined in Figure 2, the initial overarching theme of the study, entitled 'The Role of Artificial Intelligence in Education', was further categorised into three subsidiary themes.

Figure 1
The role of AI in Education

The results regarding the role of AI in education show that AI applications increase student interaction, and given the students' interest in technology, we see that their class participation increases with the support of AI. The following statements, attributed to participant Ahmet, further substantiate this assertion: 'It makes the lesson more interesting for students and motivates them to actively participate in the activities [Ahmet].' A review of the extant literature suggests

that there is a positive relationship between teacher-student interaction and teaching in online environments (Yang et al., 2021). Furthermore, studies conducted by Handa (2020) demonstrate a positive relationship between teacher-student interaction and students' emotional involvement. When students interact, they are not only more motivated to learn, but also more attentive, participative, and inclined to exchange ideas with others (Sims, 2003). On the other hand, individual learning without interaction may lead to low engagement of students (Ding et al., 2018). As posited by Kim and Lee (2012), a sense of community and interaction has been demonstrated to be correlated with student engagement. Furthermore, Anderson's (2003) study asserts that interaction constitutes a pivotal component of the educational process, both within the online sphere and within physical campuses.

Participants stated that the use of AI tools (e.g., ChatGPT and Gemini) in content creation and creative projects increased creativity. They also state that AI contributes to the concretisation of students' ideas. Elif stated that AI supports creative thinking skills as follows: 'They express that their work has become much easier and AI supports their creativity [Elif]'. We must recognise that education today is different in its structure and practice from that of previous generations, not only because of the impact of technology and the Internet but also because every human being reads, works and operates throughout his/her life in a global community unknown to previous generations. Education therefore needs to foster creativity and innovation to prepare students for the global, technology-driven world (Treffinger et al., 2021). Creativity is a priority for education. It is at the centre of 21st-century learning processes and in this context requires teachers to nurture everyday creativity and develop more creative approaches (Collard & Looney, 2014). Creativity and innovation have been shown to contribute to critical thinking and problem-solving (Almulla, 2023). Creativity is a complex, multidimensional concept that can be explained on the basis of many sciences, including psychology, sociology, philosophy and economics (Smith, 2019). Although creativity has different meanings, it is a term attributed to people. In this context, three types of creative individuals can be identified: those who demonstrate unusually high levels of intelligence, and who thus express ideas that are both unusual and stimulating; those who are personally creative, and who experience the world in a new way, and thus discover things of importance; and those who are creative, and who change the world's culture and way of thinking with their discoveries and achievements (Rukhsar, 2019).

It was asserted by participants that AI tools assist teachers in enriching course content and developing innovative teaching methods. It was further asserted that such personalised approaches contribute positively to students' learning processes. There was also a clear emphasis on the fact that AI enriches course content and modernises teaching methods. Ahmet and Ergün support this view: 'A well-structured lesson plan and learning content will help to develop all four skills.' [Ahmet], 'We teach listening and monitoring skills more quickly and systematically.' [Ergün]. Research undertaken to foster creativity and innovation in education has identified four primary areas of focus: organisational structures, individual characteristics, educational methods and content (Pisanu & Menapace, 2014). In this context, it can be posited that the refinement of educational methods through the integration of AI tools, coupled with a personalised approach, has the potential to enhance language learning. As posited by Rizvi (2023), the utilisation of AI technologies, such as virtual assistants and intelligent tutoring systems, facilitates the provision of personalised feedback and adaptive assessments, thereby accounting for the individual needs and preferences of the learner. In this sense, it can be posited that educational methods designed with AI contribute positively to learning.

3.2. Challenges and Barriers

As illustrated in Figure 3, three sub-themes were identified from the overarching theme of 'Challenges and Barriers'.

Figure 3
Challenges and barriers
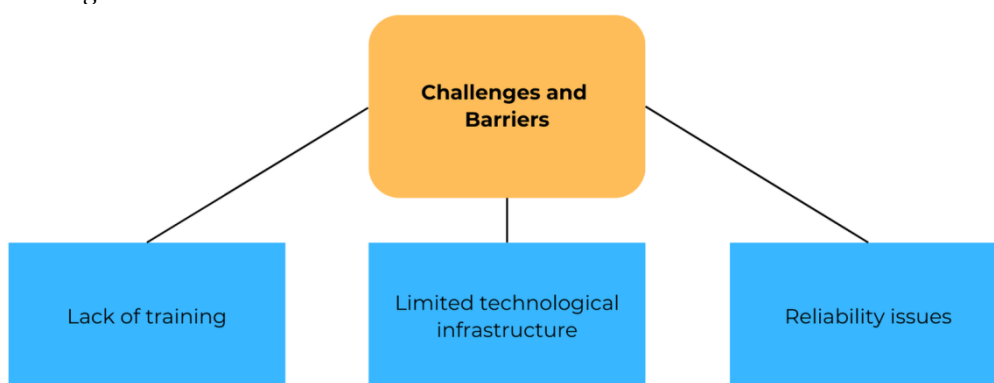
Participants emphasise that teachers do not receive sufficient training on AI and technology integration. The greatest challenge for teacher education in the twenty-first century is to produce qualified teachers who will educate and prepare the future generation that society needs. The opinions of Cemre and Erkan who support this situation are as follows: ' 'I do not think I have received enough training.' [Cemre], 'No, I have not received any training on AI [Erkan]'. From this perspective, two main aspects of teachers' professional development are highlighted: Bridging the gap between practice and theory to improve the quality of teaching, and practice-based professional development to enable teachers to work as teachers in the long term (Holmqvist, 2019). While the fact that qualified teachers who will educate the new generation should be equipped with up-to-date knowledge and skills is obvious, we can say that knowledge and skills related to AI technologies and applications are inevitable for these teachers.

Participants stated that the fact that educational institutions do not have sufficient resources and infrastructure for AI and technology negatively affects the educational processes. The opinions of Ergün and Selim support this situation: 'Internet connection, not enough application opportunities for all children [Ergün]', 'Lack of technological equipment and infrastructure [Selim]'. Studies show that educational technologies make a positive contribution to classroom learning. These technologies offer systematic ways to improve learning processes and outcomes, but the implementation phase should be carefully considered. The selection and implementation of appropriate technologies are crucial to maximise benefits and mitigate potential negative impacts, ultimately improving the quality of education and meeting needs effectively and efficiently (Asio & Gadia, 2024). Technological deficits in education are seen as a major challenge in different contexts (Statti & Torres, 2020).

Participants state that they are concerned about the data security of AI and digital tools. Stating that the reliability of AI tools used in education is important for the effectiveness of teaching processes, participants stated that users should be trained to use these tools safely. It is acknowledged that AI has become pervasive in educational processes, having permeated all facets of life. Teachers have expressed apprehensions that this technology may potentially compromise the integrity of the educational process. This assertion is corroborated by the following statement made by the participant known as Demir: 'All feedback should be checked from authentic and primary sources [Demir]'. The integration of AI in education has been extensive, encompassing administrative functions, pedagogical methods, and personalised learning. However, concerns regarding the reliability of AI in educational settings have emerged (Chen et al., 2020).

3.3. Artificial Intelligence and Student Motivation

As indicated in Figure 4, three sub-themes were identified from the overarching theme of Artificial Intelligence and Student Motivation.

Figure 4
AI and student motivation
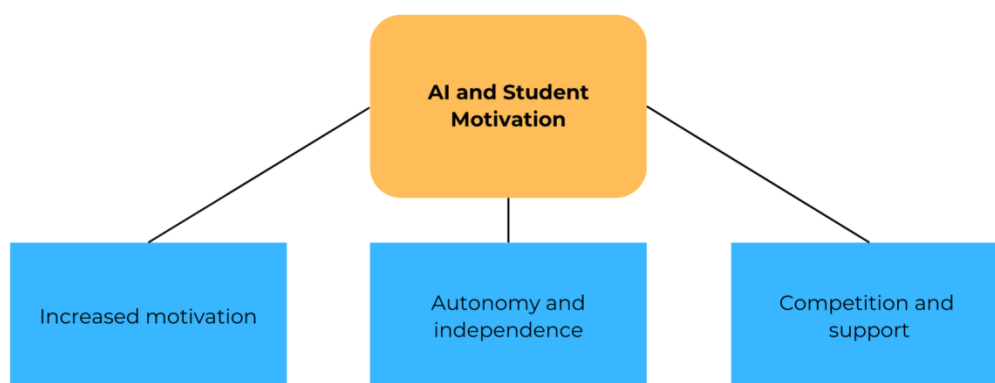
Participants state that AI applications increase students' motivation by making the lessons more interesting and students actively participate in the activities. In this context, the opinions of Ahmet and Ergün lend support to this situation: 'It makes the lesson more interesting for students and motivates them to actively participate in the activities.' [Ahmet], 'It increases the attention level of children and positively affects their motivation.' [Ergün]. Intelligent AI systems have been demonstrated to possess the capacity to motivationally stimulate, sustain, and enhance students' aspiration and aptitude for learning (Sevnarayan, 2024). A multitude of studies have emphasised the impact of AI applications on motivation in education, with many suggesting that AI technologies have the potential to increase student motivation by meeting competency needs and providing personalised learning experiences (Alasgarova & Rzayev, 2024; Sevnarayan, 2024). Research indicates that AI applications exert a positive influence on student motivation by facilitating content acquisition, enhancing learning abilities, and fostering increased confidence (Rind et al., 2024). AI plays a pivotal role in the transformation of educational experiences and the intrinsic motivation of students. Furthermore, the enhancement of learning experiences, autonomy, and critical thinking skills has yielded the conclusion that AI tools have a favourable impact on motivation (Mohamed et al., 2024).

Participants state that AI tools allow students to learn at their own pace and can create environments where they can develop their language skills on their own: 'They can easily create environments where they can practice language skills on their own.' [Hande]. In contemporary education, the promotion of student autonomy has emerged as a pivotal objective, with research highlighting its significance in enhancing academic performance and cultivating self-organisation skills (Vellanki et al., 2024). Studies have demonstrated that a hybrid approach, integrating autonomy support with instructor control, has proven to be the most effective strategy for enhancing both intrinsic and extrinsic motivation among students, thereby contributing to their improved academic performance (Vellanki et al., 2024). The notion of autonomy and independence in language education has emerged as a pedagogical goal in alignment with broader educational philosophies and the development of lifelong learning (Raya, 2013). In the contemporary context, autonomy remains a pivotal goal and approach, particularly in the domain of language learning (Benson & Voller, 2014). It is therefore possible to conclude, in consideration of the aforementioned points, that the provision of autonomy support by educators has been demonstrated to increase student engagement, by virtue of the fact that it helps them fulfil their need for autonomy, that is to say, the experience of volition (Hospel & Galand, 2016).

Participants stated that students using AI can support each other in order to use technology positively in lessons and a sweet competition will occur. Selim and Demir supported this view: 'Students using AI will support each other to use technology positively in lessons and a sweet competition will occur.' [Selim], 'It has a positive effect on group activities.' [Demir]. The combination of competition and cooperation has been demonstrated to yield favourable outcomes (Kristensen et al., 2015). When competition is perceived as a friendly and non-threatening

situation, characterised by a collaborative and supportive environment, it can be instrumental in fostering a sense of belonging (Ooi & Cortina, 2023). In this context, it can be posited that the content produced with AI helps to prepare a collaborative and supportive environment.

3.4. Ethics and Social Dynamics

As illustrated in Figure 5, the primary theme of "Ethical and Social Dynamics" is subdivided into three subsidiary themes.

Figure 5
Ethical and social dynamics
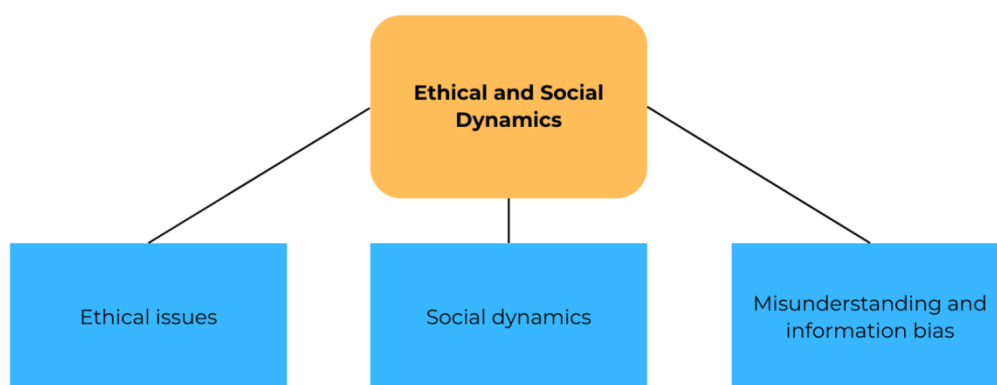
Participants stated that they believe that AI may cause ethical problems in education, ethical problems may be valid for all courses, and uncontrolled use may cause negativities in the value world. In this context, Ergün expresses his concern: 'Yes, but ethical problems will arise not only in Turkish but in all fields.' [Ergün]. In addition, Çiçek asserted that 'it can create problems especially in copyright.' [Çiçek]. Whilst the utilisation of AI in education holds great potential for enhancing efficiency and democratisation, it is imperative to acknowledge the ethical concerns that have been raised concerning privacy, bias, and transparency (Schiff, 2020). Privacy and data protection, equity and bias, and the impact on teacher-student relationships are pivotal ethical considerations that necessitate meticulous deliberation. Initially developed for students, AI tools have expanded to encompass applications for teachers and administrators, as well as tools to support classroom management. The significance of ethical considerations in AI applications has increased significantly since the early days of this technology. This is due to concerns that the autonomy of students and teachers may be compromised, that the utilisation of student data may be misused, that AI may exacerbate existing inequalities by introducing prejudices into educational decision-making, and that AI possesses a generally disconcerting reputation (du Bolubay, 2023). It is imperative that ethical issues, such as data privacy, algorithmic bias and potential discrimination, are addressed proactively to ensure the responsible adoption of AI in educational settings (Akgün & Greenhow, 2021). The duality inherent in AI capabilities is of particular note: whilst these capabilities can significantly enhance technological progress, they also pose serious risks to privacy and security if not properly managed. This assessment suggests that technological progress should be balanced with strict data protection practices (Yao & Weng, 2024).

Participants state that AI applications increase social interaction among students, especially positively affect group activities, and contribute to the progress of students who cannot express themselves. It is an established fact that children spend the majority of their waking hours in educational establishments, and, in this sense, schools and classrooms can be regarded as significant environments for the development of children's social interactions and peer relationships. The opinions of Demir and Kağan supporting this situation are as follows: 'Uncontrolled use can cause radical changes in the value world.' [Demir]. 'It contributes to the progress of students who cannot speak much or express their thoughts. It increases participation in classroom activities.' [Kağan]. In addition to the well-documented fact that belonging to a social group is associated with psychosocial well-being and healthy living, there is also a strong

correlation between children's social well-being and friendships with peers on the one hand, and school motivation and academic performance on the other (Bølling et al., 2019). Furthermore, there is ongoing development of AI tools designed to enhance students' collaborative skills by emphasising relationship dimensions and providing feedback on group interactions (Kavitha & Josith, 2024).

Some of the participants stated that AI carries the risk of erroneous information, that the data obtained should be verified from different skis, and at the same time, incorrect and uncontrolled information piles will negatively affect language learning. The opinions of Hande and Kağan about the issue are as follows: 'An uncontrolled mass of information can cause students to use the language incorrectly and learn the wrong things, leading to language deterioration. Other sources should be used to confirm the information obtained.' [Hande], 'Quality artificial intelligence applications are paid, free ones give wrong information, lack of Turkish language, artificial intelligence mixes some information and writes as if it is certain. It is easy for people with little knowledge to be misled by artificial intelligence.' [Kağan]. Misinformation, defined as knowledge that is factually incorrect or contradicts the best available expert consensus evidence, has the potential to influence educational policy, programmes and practice in terms of student learning, achievement and well-being (Kendeou & Johnson, 2024). In recent years, the pervasive utilisation of generative AI and large language models has further expedited the proliferation of misinformation in media outlets. Recent research indicates that individuals often lack the capacity to discern between AI and human-generated texts. The rapid generation of substantial quantities of text by large language models has the potential to disseminate misinformation on a vast scale, thereby precipitating an AI-driven information epidemic (Siani et al., 2024). The development of ethical AI practices and AI literacy education is therefore paramount in order to combat the spread of misinformation supported by AI (Opesemowo & Ndlovu, 2024).

3.5. Future Expectations

As illustrated in Figure 6, three sub-themes were identified from the overarching theme of 'Future Expectations'.

Figure 6
Future expectations
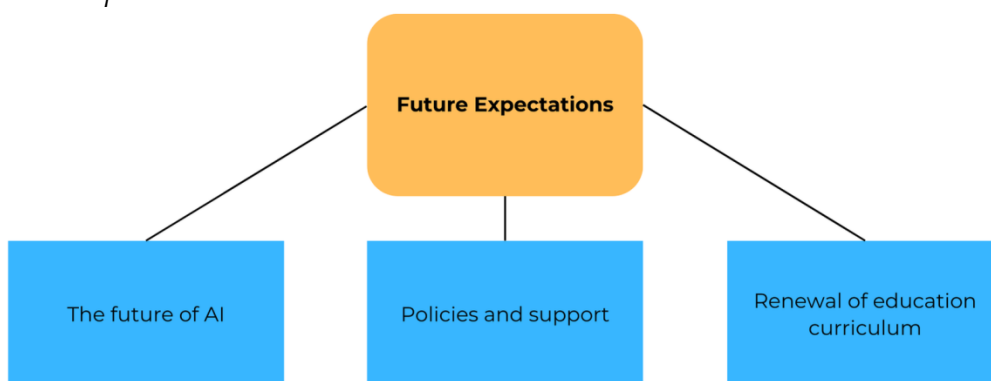
Participants in the study asserted that the role of AI in education will undergo a gradual escalation, with its efficacy being demonstrated in the domain of language learning, particularly in the development of speaking and writing skills. It was further posited that AI will prove to be more efficient in the context of higher-level skills, as remarked by Ahmet: 'It will be very effective in the field of Turkish education as in every field.' [Ahmet]. In addition, Demir and Selim favoured the idea: 'It will become more efficient for high-level skills.' [Demir]; 'Artificial intelligence will revolutionise Turkish education in the fields of reading, listening, writing and speaking. Therefore, it will be very useful if this technology is used.' [Selim]. Recent studies have indicated that AI is poised to revolutionise education by providing personalised learning experiences, intelligent tutoring systems and automated administrative tasks (Baidya & Kumar, 2024; Mohaghegh, 2020).

The potential applications of AI in education include chatbots, learning analytics and adaptive learning systems that have the capacity to increase student engagement and provide specialised support (Ajani et al., 2025; Baidya & Kumar, 2024). The research conducted indicates that individualised AI applications may increase student participation in the future.

According to the findings, the participants emphasised that education policies should be updated in a way to support AI applications and keep pace with the age, so that students who are intertwined with technology at a young age can follow the world standards up to date and direct them. Recent studies indicate that governments and schools should continue to prioritise the exploration of novel trends and opportunities in the application of AI to education. In this context, Selim and Hande's remarks to the relevant question in the interview form support this situation: 'The Ministry of National Education should include artificial intelligence in educational technologies as soon as possible.' [Selim], 'It should be supported. Students who are intertwined with technology at a young age can follow and direct world standards more up-to-date.' [Hande]. Acknowledging the transformative impact of these applications on the future of education and student learning, governments must provide adequate support to schools and emphasise the cultivation of fundamental competencies (Chung, 2021). To leverage the potential of AI in education, governments must concurrently address challenges, generate innovative ideas and policies, and foster an environment conducive to creativity. It is acknowledged that educational policy applications for AI are currently in their infancy phase, and it is anticipated that these applications will undergo rapid proliferation in the ensuing decade (Tanveer et al., 2020).

Participants further asserted the necessity for the development of an independent curriculum to be utilised in conjunction with AI, and the organisation of in-class activities in Turkish language teaching according to the principles of AI. Recent research has highlighted the growing significance of AI across various levels of education. In light of this development, it is imperative to re-evaluate the educational process, particularly the curriculum, to align with this emerging paradigm. The opinions of Demir and Selim supporting this situation are as follows: 'An independent curriculum should be developed for its use.' [Demir], 'Turkish course curriculum should be based on artificial intelligence and all in-class activities should be organised according to artificial intelligence.' [Selim]. The development of the 'Classroom of the Future' concept necessitates new pedagogical approaches that combine education, curriculum and technology to prepare future teachers for technology-based classrooms and students with digital competence (Cardoso, 2019).

4. Conclusion

In this study, the views of Turkish course teachers on the use of AI were examined within the framework of a phenomenological design. The findings of the study were categorised under main themes such as the role of AI in education, difficulties encountered, effects on student motivation, ethical and social dynamics, and expectations for the future.

The prevailing sentiment among the teaching community was one of optimism regarding the potential of AI to enhance educational outcomes. Teachers emphasised the potential of AI to increase interaction in lessons. The utilisation of interactive applications has been identified as a key factor in enhancing student participation and rendering the learning process more engaging. Additionally, the capacity of AI to stimulate creativity enables students to undertake innovative projects, thereby enhancing their creative thinking skills. Furthermore, AI technologies have been found to make significant contributions to language learning by providing individualised learning processes.

The research identified several challenges pertinent to the integration of AI in education. A notable challenge pertains to the inadequate training of teachers in the utilisation of AI, which hinders their ability to employ these tools effectively in the classroom. Additionally, inadequate technological infrastructure, hardware limitations, and internet access challenges contribute to the constrained application of AI. Concerns regarding the reliability of information provided by AI

have also been expressed by teachers, which raises concerns about its potential to adversely impact learning processes due to the risk of providing inaccurate information.

A notable finding of the study pertains to the impact of AI on student motivation. Teachers have asserted that AI applications hold the potential to enhance students' inclination to learn, particularly through gamification elements that render lessons more engaging. The provision of opportunities for independent learning to students has been found to foster their independence, while concurrently facilitating a collaborative learning environment through the cultivation of a competitive yet harmonious atmosphere.

The ethical considerations of AI in education are recognised as a significant concern for educators, necessitating their consideration. The ethical dimensions, including privacy, data protection and algorithmic bias, must be addressed in the context of the impact of AI applications in education. Furthermore, educators are cognizant of the influence of AI on social dynamics in education, with the transformation in social interactions in the classroom enhancing students' propensity to collaborate and refine their social skills.

In anticipation of future developments, educators anticipate an escalating role for AI in education. It was emphasised that education policies should support the use of AI, to enhance the quality of education. In addition, the necessity of renewing the education curriculum in line with AI was expressed by the teachers. This will contribute to making future education systems more effective and efficient.

In conclusion, it is evident that educators hold a profound optimism regarding the potential of AI technologies to be employed within the educational sector. However, to realise this potential, teachers must be trained by receiving adequate training in the field or to complete these processes with in-service training. In addition, relevant institutions need to strengthen the technological infrastructure, for education programmes to be redesigned with the awareness of innovations brought by the age of institutions with the power to regulate education policies, and for ethical problems that come with AI to be proactively addressed. The consideration factors outlined here for the effective use of AI in education will enable an efficient and safe educational experience that takes into account the needs and interests of students in the future.

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