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Artificial Intelligence in Language Education: Transforming Pedagogy and Administration in Turkish Digital Humanities

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Purpose—This paper investigates the transformative potential of Artificial Intelligence (AI) in the context of Turkish Schools of Foreign Languages (SFLs). It explores how AI technologies are reshaping teaching, learning, and administration, emphasizing a balance between technological efficiency and humanistic educational values. Design/methodology/approach—Using a qualitative case study design, the research draws on interviews with educators, administrators, and policymakers, complemented by document analysis of institutional policies and national AI frameworks. The analysis was guided by the Technological Pedagogical Content Knowledge (TPACK) framework and Digital Humanities principles to ensure both pedagogical and ethical considerations. Findings—The study highlights that AI enhances adaptive learning, automates administrative processes, and supports personalized instruction. However, implementation remains uneven due to limited teacher training, infrastructural disparities, and ethical challenges related to data privacy and algorithmic bias. The study proposes a Humanistic AI Framework integrating pedagogical, administrative, and ethical dimensions to promote equitable and sustainable adoption. Practical implications—The framework offers a roadmap for Turkish institutions to implement AI strategically, focusing on teacher professional development, policy formulation, and equitable access. It also underlines the need for ethical safeguards to preserve human agency in education. Originality/value—By situating AI adoption within the Turkish higher education context, this study contributes original insights into the intersection of AI, pedagogy, and administration. It bridges the theoretical constructs of TPACK and Digital Humanities, proposing a culturally responsive model for AI integration in multilingual and multicultural academic settings.

Keywords: Artificial Intelligence, language education, humanistic framework, educational management, Turkish Schools of Foreign Languages

Introduction

Artificial Intelligence (AI) has become one of the most influential technological developments of the twenty-first century, transforming industries and redefining the ways knowledge is created and shared. In education, AI serves as both a tool and a catalyst for rethinking how learning occurs. Across the world, universities are employing intelligent tutoring systems, natural language processing, and predictive analytics to personalize instruction and improve administrative efficiency (Selwyn, 2019).

In Turkey, Schools of Foreign Languages (SFLs) occupy a central role in English language education. These institutions face increasing expectations to integrate technology into their pedagogy and management systems to

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meet international standards while remaining sensitive to local contexts. The current study focuses on how AI is being implemented within Turkish SFLs, what challenges educators and administrators encounter, and how a humanistic approach can ensure sustainable and ethical use of AI.

The discussion begins by outlining the global trends in AI-enhanced education and the implications for language pedagogy and administration. It then narrows its focus to the Turkish higher education context, highlighting the opportunities and ethical concerns that accompany digital transformation. Ultimately, this research aims to bridge technology and humanity, presenting a Humanistic AI Framework that supports culturally grounded and pedagogically sound integration.

Literature Review

AI has transformed educational practices worldwide through technologies that facilitate personalized learning, automate assessments, and optimize institutional decision-making (Williamson & Eynon, 2020). In language education, AI tools such as automated essay scoring, intelligent chatbots, and speech recognition systems are increasingly common (Godwin-Jones, 2020). These innovations provide immediate feedback, enhance learner engagement, and enable data-driven instructional design.

However, the literature reveals an ongoing tension between technological efficiency and educational ethics. Studies warn against the risks of overreliance on AI, the devaluation of teacher expertise, and potential algorithmic bias (UNESCO, 2021). Ethical frameworks stress the need for transparency, cultural responsiveness, and data protection. UNESCO's (2021) guidelines for policymakers advocate for AI systems that promote inclusion, fairness, and respect for human rights.

In Turkey, the Vision 2023 initiative has accelerated educational digitalization, but infrastructural disparities and uneven teacher preparedness remain obstacles (Taşçı & Tunaz, 2024). AI integration is most successful when supported by institutional leadership, professional development, and ethical awareness. Thus, AI in education must not only be technologically sound but also pedagogically and culturally aligned.

Theoretical Framework

This study is grounded in three interrelated theoretical perspectives: the Technological Pedagogical Content Knowledge (TPACK) framework, Constructivism, and Digital Humanities. TPACK (Mishra & Koehler, 2006) emphasizes the intersection of technological, pedagogical, and content knowledge required for effective teaching with technology. Constructivism (Vygotsky, 1978) underscores the learner's active role in constructing meaning through interaction and reflection, aligning with AI's adaptive learning capabilities.

The Digital Humanities perspective (Berry & Fagerjord, 2017) expands this discussion by situating AI within broader humanistic values—creativity, culture, and ethics. Together, these frameworks provide a foundation for the Humanistic AI model proposed in this paper. They ensure that AI implementation enhances, rather than replaces, the human dimension of education.

Methodology

A qualitative research design was employed to capture educators' and administrators' perceptions of AI in Turkish SFLs. Twenty educators, five administrators, and three policymakers participated in semi-structured interviews, conducted either in Turkish or English. Document analysis complemented the interviews, covering

Turkey's Education Technology Strategy Reports (2020-2023), institutional AI adoption policies from three universities, and the OECD AI in Education Framework (2021).

Data were analyzed thematically using the method of Braun and Clarke (2006). The process involved open coding of interview transcripts, identification of recurring ideas, and synthesis into overarching themes. Triangulation of data sources ensured credibility, while reflexive journaling enhanced confirmability. Ethical clearance was obtained, and participant anonymity was strictly maintained.

The study's design enabled an in-depth understanding of contextual realities in Turkish higher education, revealing both systemic and human factors influencing AI integration. This approach aligns with Creswell and Poth (2018), who argue that qualitative inquiry is essential for exploring emerging educational phenomena shaped by culture and technology.

Findings and Discussion

The analysis revealed four dominant themes: teacher perceptions, administrative challenges, student engagement, and ethical concerns. Educators generally viewed AI as a valuable support for reducing workload and providing personalized feedback but expressed uncertainty about its reliability in nuanced language contexts. Many participants emphasized the lack of formal training opportunities and institutional guidance for integrating AI effectively.

Administrators noted challenges related to infrastructure, funding, and privacy regulations. One remarked that "allocating resources for AI is difficult when basic facilities still need improvement". These concerns echo international debates on the digital divide and the ethics of data management (UNESCO, 2021). Students, meanwhile, appreciated interactive AI tools like chatbots but occasionally questioned their accuracy and responsiveness.

The findings confirm that while AI offers pedagogical and administrative promise, successful integration depends on human readiness, policy coherence, and ethical accountability. This aligns with the TPACK model's assertion that technology adoption must harmonize with pedagogical intent and contextual relevance.

Proposed Humanistic AI Framework

Drawing from the study's findings, a Humanistic AI Framework is proposed to guide ethical and effective AI adoption in Turkish Schools of Foreign Languages. The framework consists of three interdependent pillars: Pedagogical Integration, Administrative Support, and Ethical Safeguards.

Pedagogical Integration emphasizes using AI to complement, not replace, human teachers. AI should assist in adaptive feedback, student analytics, and formative assessment while allowing educators to maintain control over instructional design. Administrative Support focuses on developing institutional policies, funding mechanisms, and capacity-building programs that promote digital equity and sustainability.

Ethical Safeguards ensure transparency, data protection, and fairness in AI-driven decisions. Institutions should establish ethical review boards, adopt privacy policies consistent with international standards, and foster digital literacy among staff and students. Collectively, these elements create a balanced system where technology enhances learning without compromising human dignity.

Conclusions and Recommendations

This study underscores that the transformative power of Artificial Intelligence in education depends not only on innovation but also on human judgment. In Turkish Schools of Foreign Languages, AI offers opportunities

for personalized learning and improved administrative efficiency. Yet, these gains require systematic investment in teacher training, ethical frameworks, and infrastructural equity.

The proposed Humanistic AI Framework provides a roadmap for integrating AI into education responsibly. For educators, it calls for continuous professional development and reflective teaching practices. For administrators, it recommends strategic planning and data governance structures. For policymakers, it highlights the need for national AI guidelines that balance innovation with inclusion and ethics.

Ultimately, this research contributes to a growing body of literature advocating for human-centered technology in education. The future of AI in language learning will not depend solely on algorithms, but on how educators, institutions, and societies choose to use them to advance both learning and humanity.

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