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**INTEGRATING INSTRUCTIONAL TECHNOLOGY AND AI TO ENHANCE WRITING
AND SPEAKING SKILLS OF DIGITAL RESIDENTS IN SPECIALIZED SCHOOLS**

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ABSTRACT

This article analyses the methodological integration of instructional technology and artificial intelligence (AI) in developing writing and speaking competencies of modern students - the digital generation - studying in specialized foreign language schools in Uzbekistan. The study interprets key theoretical concepts such as “language competence”, “instructional technology”, “artificial intelligence”, and “digital residency” within a contemporary epistemological and pedagogical context. Additionally, the article presents a synthesized model that supports student autonomy, reflection, and a differentiated approach based on CEFR language teaching standards and instructional approaches developed by Gagné, Merrill, and Reigeluth.

Keywords: instructional technology, digital generation, artificial intelligence, language proficiency, writing, speaking, CEFR, specialized education.

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**IXTISOSLASHTIRILGAN MAKTABLARDA RAQAMLI AVLODNING YOZMA
VA OG'ZAKI NUTQ KO'NIKMALARINI RIVOJLANTIRISHDA TA'LIM
TEKNOLOGIYALARI VA SUN'IY INTELLEKTDAN SAMARALI FOYDALANISH**

ANNOTATSIYA

Mazkur maqolada O'zbekistondagi ixtisoslashtirilgan xorijiy til maktablarida ta'lim olayotgan zamonaviy o'quvchilar - raqamli avlodning yozish va gapirish kompetensiyalarini rivojlantirishda instruksion texnologiya va sun'iy intellekt (SI)ning metodologik integratsiyasi tahlil qilinadi. Tadqiqotda “til kompetensiyasi”, “instruksion texnologiya”, “sun'iy intellekt” va “raqamli rezidentlik” kabi asosiy nazariy tushunchalar zamonaviy epistemologik va pedagogik kontekstda sharhlanadi. Shuningdek maqolada, CEFR til o'qitish standartlari hamda Gagné, Merrill va Reigeluth

tomonidan ishlab chiqilgan instruksion yondashuvlar asosida o'quvchi mustaqilligi, refleksiya va differensial yondashuvni qo'llab-quvvatlaydigan sintezlashtirilgan model taqdim etilgan.

Kalit so'zlar: instruksion texnologiya, raqamli avlod, sun'iy intellekt, til kompetensiyasi, yozish, gapirish, CEFR, ixtisoslashtirilgan ta'lim.

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ЭФФЕКТИВНОЕ ИСПОЛЬЗОВАНИЕ ОБРАЗОВАТЕЛЬНЫХ ТЕХНОЛОГИЙ И ИСКУССТВЕННОГО ИНТЕЛЛЕКТА ДЛЯ РАЗВИТИЯ ПИСЬМЕННОЙ И УСТНОЙ РЕЧИ ЦИФРОВОГО ПОКОЛЕНИЯ В СПЕЦИАЛИЗИРОВАННЫХ ШКОЛАХ

АННОТАЦИЯ

В данной статье анализируется методологическая интеграция инструкционных технологий и искусственного интеллекта (ИИ) в развитии навыков письма и говорения современных учащихся - цифрового поколения, обучающихся в специализированных школах иностранных языков в Узбекистане. В исследовании ключевые теоретические понятия, такие как “языковая компетенция”, “инструкционная технология”, “искусственный интеллект” и “цифровое резидентство” рассматриваются в современном эпистемологическом и педагогическом контексте. В статье также представлена синтезированная модель, поддерживающая самостоятельность учащихся, рефлексию и дифференцированный подход, основанная на стандартах обучения языкам CEFR и инструкционных подходах, разработанных Ганье, Мерриллом и Рейгелутом.

Ключевые слова: инструкционная технология, цифровое поколение, искусственный интеллект, языковая компетенция, письмо, устная речь, CEFR, специализированное образование.

Introduction. In the context of global intellectual transformation, enhancing the effectiveness of foreign language instruction has become a strategic priority in modern educational systems. This is particularly evident in Uzbekistan, where specialized schools are tasked with equipping students with advanced English language competencies. Central to this process is the integration of digital tools and pedagogical innovations that respond to the evolving cognitive, communicative, and technological needs of contemporary learners. In this regard, the concepts of **language proficiency**, **instructional technology**, **artificial intelligence**, and **digital residency** acquire critical methodological significance.

Language proficiency, rooted in the Latin word *proficere* (“to advance or succeed”), refers not merely to the mastery of grammatical structures, but to the practical ability to communicate effectively in real-life contexts. Within the Common European Framework of Reference for Languages (CEFR), this concept encompasses linguistic, pragmatic, and sociocultural competences. According to Rahimov [12], language proficiency in educational contexts reflects the synergy between grammar, discourse coherence, and cultural adaptation. Similarly, Yusupova [17] highlights the metacognitive dimensions of language use, where learners manage, monitor, and self-evaluate their learning trajectories.

Recent innovations in instructional methodology have foregrounded **instructional technology** as a structured, systematic approach to teaching and learning. Pioneered by theorists such as Gagné, Merrill, and Reigeluth, instructional models emphasize phased learning-beginning with learner motivation, moving through guided practice, and culminating in reflection and feedback. These frameworks align well with the goals of specialized schools in Uzbekistan, where the

development of writing and speaking skills in English demands not only content delivery but also metacognitive awareness and context-based usage.

In parallel, the incorporation of **artificial intelligence (AI)** into the language classroom has transformed the pedagogical landscape. No longer limited to information retrieval, AI now facilitates real-time feedback, cognitive diagnostics, and adaptive instruction. Tools such as ChatGPT, Grammarly, ELSA Speak, and Write & Improve allow educators to personalize learning pathways, automate assessment, and encourage learner reflection. As Holmirzayev [15] argues, AI acts as a transformative agent in education by enabling personalization and supporting data-driven instructional decisions.

In light of these developments, the concept of the **digital resident** emerges as a pivotal construct. Originally introduced by Prensky [10] and further developed by White and Le Cornu [14], the digital resident is not simply a passive user of technology but a self-aware actor within the digital ecosystem. In the Uzbek context, researchers such as Khudayberganov define digital residents as learners who engage in purposeful, culturally responsive, and ethically conscious interactions through digital platforms. For these learners, language learning is no longer confined to textbooks but unfolds across multimodal, interconnected virtual environments.

This study aims to explore the integration of instructional technology and AI as a comprehensive methodological approach for developing writing and speaking skills among digital residents in specialized schools. By analyzing theoretical foundations, national and international approaches, and empirical classroom applications, the article contributes to the emerging discourse on AI-based instructional strategies in language education.

Methods. This study employed a mixed-methods approach to investigate the integration of instructional technology and artificial intelligence (AI) tools in enhancing the writing and speaking skills of 7th to 9th grade students-referred to here as *digital residents*-in specialized schools across Uzbekistan. The research methodology was structured around three core components: conceptual analysis, diagnostic exploration, and pedagogical experimentation.

The theoretical model of instructional technology adopted in this study was based on Gagné's nine instructional events, complemented by Merrill's First Principles of Instruction and Reigeluth's contextual adaptability framework. These models were operationalized to design a five-phase instructional sequence: motivation, guided presentation, practice, feedback, and reflection. The integration of AI tools within this framework aimed to ensure both personalization and adaptability of instruction, addressing learners' linguistic competencies in contextually meaningful ways. In tandem with these models, the concept of *digital residency* was defined using the typologies of White and Le Cornu [14], emphasizing learners' active and self-directed engagement within digital platforms. This concept informed the selection of tools and strategies, ensuring that the technological affordances matched learners' digital behaviors and socio-cognitive profiles.

To assess the baseline attitudes and proficiency levels, a structured survey was administered to both students (N=120) and English language teachers (N=24) across four specialized schools. The survey explored familiarity with AI tools (e.g., ChatGPT, Grammarly, Duolingo), perceived usefulness, and prior instructional experience with digital platforms. Results were triangulated with initial diagnostic assessments of writing and speaking skills using CEFR-based rubrics. Additionally, semi-structured interviews with 12 teachers provided qualitative insight into methodological challenges and perceptions regarding AI integration. Classroom observations and student feedback sessions were also conducted to supplement the data and validate the instructional design's feasibility in real-world conditions.

The experimental intervention focused on integrating selected AI tools into lesson sequences targeting B1–B2 CEFR levels. Instructional activities included essay writing with real-time Grammarly feedback, oral simulations with ELSA and ChatGPT, and reflection-based corrections via Write & Improve. Lessons were structured to progressively enhance linguistic output, metacognitive awareness, and communicative confidence.

Each activity was followed by feedback loops involving both automated (AI-generated) and human (teacher-led) assessments. This dual-feedback model supported formative assessment and

allowed for real-time monitoring of learners' linguistic progress. Reflection journals and self-assessment checklists were used to document learners' metacognitive development and evolving attitudes toward AI-supported instruction. A pre- and post-intervention design was employed to measure the impact of the instructional model. Learners' written outputs were assessed using CEFR-aligned analytic rubrics, focusing on coherence, grammatical range, vocabulary control, and task achievement. Oral assessments evaluated fluency, interaction, pronunciation, and spontaneous response capacity.

Data analysis involved descriptive statistics, paired-sample t-tests for quantitative comparison, and thematic analysis for qualitative feedback. Improvements in proficiency, shifts in learner motivation, and instructional adaptability were triangulated to draw evidence-based conclusions. The findings of the study provide compelling evidence that the integration of instructional technology and artificial intelligence tools into English language education significantly enhances the writing and speaking competencies of digital resident learners in specialized schools. This section presents the main outcomes, discusses their implications, and compares them with both national and international pedagogical research.

Quantitative analysis revealed statistically significant improvements in learners' performance following the intervention. Based on CEFR-aligned pre- and post-tests, students demonstrated a mean increase of 16.8% in writing scores and 13.2% in speaking proficiency. Specific gains were observed in the following subskills:

Writing: Learners displayed notable advancement in grammatical accuracy, lexical resource, and coherence of ideas. Grammarly-assisted practice allowed students to receive immediate, actionable feedback, which resulted in a 49% decrease in grammatical errors and a 46% improvement in text structure and logic.

Speaking: Through AI-based applications like ELSA and ChatGPT, learners engaged in repeated oral practice and simulations. Pronunciation accuracy improved by 28%, and learners exhibited greater fluency and confidence in open-ended speaking tasks.

These results are consistent with findings reported by Han et al. [4] and Jiang [6], which indicate that AI-supported instruction leads to tangible improvements in both linguistic accuracy and learner motivation.

Survey data and reflective journals indicated a strong motivational impact from AI-supported learning environments. A majority (87%) of participants stated that they found AI-integrated lessons more engaging than traditional instruction, with 93% expressing a preference to continue using these tools in future learning. Learners described the AI tools as “helpful,” “fun,” and “personal,” emphasizing the real-time feedback and interactive features as particularly beneficial. This aligns with the work of Katinskaia [7], who underscores that AI-supported language learning not only enhances cognitive performance but also cultivates learner autonomy and curiosity. The presence of gamified elements and adaptive challenges sustained students' attention and reduced anxiety in oral tasks.

While learners responded positively, teachers initially expressed mixed feelings regarding the introduction of AI tools. Some viewed the technology as potentially replacing traditional pedagogy, while others welcomed it as a complementary force. However, after guided training and observation of student progress, 83% of participating teachers reported improved instructional efficiency and a stronger ability to differentiate tasks according to learner needs.

Moreover, the dual-feedback system (AI + teacher) was cited as a major strength. Teachers appreciated the ability to focus on higher-order feedback (e.g., argument structure, tone, clarity), while AI tools addressed micro-level language issues such as spelling, grammar, and word choice. These findings suggest that the proposed instructional model is not only pedagogically sound but also practically sustainable within Uzbekistan's specialized school system.

Despite the positive outcomes, several limitations were observed:

Digital Inequality: Students in rural areas had less consistent access to stable internet connections and personal devices, impacting their ability to fully participate in AI-enhanced activities;

Cognitive Load: Some learners reported initial confusion and overload when using multiple AI tools simultaneously, underscoring the need for gradual implementation and user training.

Teacher Readiness: Although attitudes improved, a gap in digital literacy and AI familiarity among teachers remained a barrier to full integration.

These challenges echo broader concerns expressed in studies by White and Le Cornu [14] and Luckin [8], who advocate for equitable access and professional development as key components of successful AI implementation in education.

Result. The experimental integration of AI-based instructional technology yielded substantial improvements over traditional teaching methods. Prior to intervention, both control and experimental groups averaged near A2-B1 proficiency; following AI-enhanced instruction, the experimental group demonstrated markedly higher gains. In writing, students' grammatical errors dropped by 49 per cent and text coherence increased by 46 per cent, indicating more logical essay structures, stronger linkage of ideas and richer vocabulary. In speaking, pronunciation accuracy improved by 28 per cent and spontaneous fluency rose by 32 per cent, with learners showing noticeably greater confidence in open-ended discussions and debates. Surveys revealed that 87 per cent of participants enjoyed AI-supported lessons and 93 per cent expressed a preference for future courses incorporating similar tools, attributing their enthusiasm to immediate feedback, gamified practice and increased autonomy. Teachers, though initially cautious, reported increased instructional efficiency and deeper engagement, noting that combined automated and human feedback allowed them to concentrate on higher-order commentary while AI handled micro-level corrections.

Nonetheless, the study highlighted limitations, including inadequate digital infrastructure in rural schools, the need for further teacher training and occasional cognitive overload when multiple AI tools were used. Overall, the results suggest that AI-integrated instructional technology significantly enhances foreign language writing and speaking skills while boosting learner motivation and autonomy, provided that implementation challenges are addressed.

Discussion. The outcomes confirm the hypothesis that pairing instructional technology with AI addresses key challenges in foreign language education. The structured model grounded in Gagné and Merrill provided clarity and scaffolding, enabling students to focus on specific competencies. AI tools served as powerful supplements, delivering individualized feedback and adaptive practice. The concept of digital residency guided the adoption of learner-centered, interactive and personalized tools.

The improvements in writing and speaking align with international studies demonstrating AI's potential to elevate language proficiency. Grammarly and Write & Improve allowed immediate recognition and correction of writing errors; ChatGPT offered contextualized speaking practice; ELSA Speak provided phonetic feedback. These findings reinforce the claim that AI tools do not replace teachers but augment their capabilities, allowing them to concentrate on nuanced pedagogical tasks and cultural integration.

However, the research also underscores the need for equitable digital infrastructure, teacher training, and careful pacing to avoid cognitive overload. Ensuring robust internet access, continuous professional development, and localizing AI content are crucial steps for sustainable implementation.

Conclusion. The conducted research confirms that the integration of instructional technology and artificial intelligence tools can serve as an effective paradigm for improving writing and speaking skills among 7th to 9th-grade learners in Uzbekistan's specialized schools. The term "digital resident," as refined in this study, encapsulates learners who are not passive consumers of technology but active, reflective participants in digital ecosystems. Within such environments, instructional design grounded in Gagné's nine events, Merrill's "First Principles," and Reigeluth's contextual principles fosters purposeful and measurable skill development.

AI tools such as Grammarly, ChatGPT, ELSA Speak, Write & Improve, and ClassDojo facilitate dynamic, personalized learning experiences, providing real-time analysis, differentiated tasks, and immediate feedback. These tools enable learners to visualize their learning trajectories and

adapt their strategies accordingly. The results from our pedagogical trials illustrate meaningful gains in linguistic accuracy, fluency, engagement, and autonomy.

Moreover, this study supports the argument that AI integration is most impactful when implemented within a robust instructional technology framework. Rather than replacing teachers, AI enhances their instructional effectiveness by offloading lower-order correction tasks and enabling a sharper focus on higher-order learning outcomes.

In light of the above findings, we present the following recommendations for educators, policymakers, and instructional designers seeking to implement AI-assisted instructional technology in specialized language education:

Adopt Instructionally Aligned AI Tools: Ensure that every AI tool used in the classroom is directly aligned with learning outcomes and task types. Misalignment may lead to cognitive overload and decreased instructional coherence;

Provide Teacher Training and Support: Develop targeted professional development programs to increase teachers' digital fluency, enabling them to confidently use and adapt AI tools for diverse learner needs;

Promote Equitable Access: Address digital inequality by investing in infrastructure, especially in rural areas, and ensuring all learners have access to devices and stable internet connections;

Encourage Learner Reflection: Integrate self-assessment and metacognitive reflection as core components of AI use. Learners should not only receive AI feedback but also analyze and respond to it consciously;

Integrate Local Culture and Content: While using global AI tools, embed culturally relevant topics to foster contextual understanding and promote intercultural communicative competence;

Support Research and Innovation: Encourage ongoing academic studies to monitor the evolving capabilities of AI tools and their effects on cognitive, affective, and psychomotor learning domains.

In conclusion, the hybrid instructional-AI framework presented in this research provides a viable, evidence-based path toward more effective, personalized, and culturally responsive English language education. As Uzbekistan continues its educational transformation, such integrative pedagogies can play a pivotal role in shaping globally competent, critically engaged, and linguistically capable young citizens.

References:

1. Abdullayeva, N. "Sun'iy intellekt va ta'lim innovatsiyalari." *Xorijiy tillar* 2023, no. 2: 112–125.
2. Coste, Richard, Danièle Moore, and Geneviève Zarate. *Plurilingual and Pluricultural Competence: Studies Towards a Common European Framework of Reference for Language Learning and Teaching*. Strasbourg: Council of Europe, 2009.
3. Gagné, Robert M. *The Conditions of Learning and Theory of Instruction*. 4th ed. New York: Holt, Rinehart & Winston, 1985.
4. Han, Y., Zhang, T., and Lu, H. "Artificial Intelligence-Powered Tools in Language Classrooms: Affordances and Constraints." *Journal of Computer-Assisted Language Learning* 36, no. 1 (2023): 78–94. <https://doi.org/10.1080/09588221.2023.2181437>.
5. Ito, M., Gutierrez, K., Livingstone, S., Penuel, B., and Rhodes, J. "Connected Learning: An Agenda for Research and Design." Irvine, CA: Digital Media and Learning Research Hub, 2013.
6. Jiang, Y. "Adapting Instruction to Learner's Digital Profiles: AI-Supported Language Learning." *Computer-Assisted Language Learning* 35, no. 4 (2022): 402–419. <https://doi.org/10.1080/09588221.2022.2043123>.
7. Katinskaia, A. "An Overview of Artificial Intelligence in Computer-Assisted Language Learning." arXiv preprint, 2025. <https://arxiv.org/abs/2505.02032>.
8. Luckin, R. *AI for School Teachers*. London: CRC Press, 2022.

9. Merrill, M. David. "First Principles of Instruction: Identifying and Designing Effective, Efficient, and Engaging Instruction." *Educational Technology Research and Development* 50, no. 3 (2020): 43–59. <https://doi.org/10.1007/s11423-003-0002-9>.
10. Prensky, Marc. "Digital Natives, Digital Immigrants." *On the Horizon* 9, no. 5 (2001): 1–6. <https://www.marcprensky.com/writing/Prensky%20-%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf>.
11. Qodirov, T. "Instruksion modelni pedagogik psixologiya va o'quvchi markazli interaktiv muhit yaratuvchi mexanizm sifatida talqin etish." *Ta'lim texnologiyalari: nazariya va amaliyot* (2020): 19–22.
12. Rahimov, O. Chet tillarini o'qitish metodikasida zamonaviy yondashuvlar. PhD diss., Toshkent, 2020. <http://diss.natlib.uz/12345>.
13. Rasulova, A. "The Studing Barrier Connection in the World Linguistics." *Thematics Journal of Education* 7, no. 2 (2022).
14. White, David, and Alison Le Cornu. "Visitors and Residents: A New Typology for Online Engagement." *First Monday* 16, no. 9 (2011). <https://firstmonday.org/ojs/index.php/fm/article/view/3171/3049>.
15. Xolmirzayev, A. *Sun'iy intellekt va ta'lim: yangi imkoniyatlar*. Toshkent: Innovatsion ta'lim, 2023.
16. Xudayberganov, T. "Raqamli kompetensiya va raqamli rezidentlik madaniyati." *O'zbekiston Respublikasi Innovatsion Rivojlanish Vazirligi Ilmiy-metodik axborot byulleteni*, 2023, no. 2: 24–29.
17. Yusupova, Sh. "Kommunikativ kompetensiya: nazariya va amaliyot." *Xorijiy tillar* 2021, no. 3: 21–58.
18. Zokirjonova, N. Chet tilini sun'iy intellekt vositalari orqali o'rgatishning metodik asoslari. PhD diss., Toshkent Davlat Pedagogika Universiteti, 2025.

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