ISNN 3030-3907

2026/3
VOLUME 1

DEVELOPMENT OF SCIENCE

ILMIY JURNAL



Development of science

Ilmiy jurnal

2026/3 VOLUME 1

ISSN 3030 -3907

Ilmiy jurnal OAK rayosatining 2024 yil 27 sentabrdagi 361-son qaroriga asosan 02.00.00 kimyo fanlari hamda 2025 yil 12 fevral 367- son qaroriga asosan 05.00.00 texnika fanlari bo‘yicha falsafa doktori (PhD) va fan doktori (DSc) ilmiy darajasiga talabgorlarning dissertatsiya ishlari yuzasidan dissertatsiyalari asosiy ilmiy natijalarini chop etish tavsiya etilgan milliy ilmiy nashrlar ro‘yxatiga kiritilgan.

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Tahririyat hay’ati a’zolarining tarkibini o‘zgartirish hamda qo‘shimcha kiritish yoki tahririyat a’zoligidan chiqarish bosh muharrir tomonidan amalga oshiriladi.

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Development of science ilmiy jurnali 2024 yil 15 aprel kuni №256445 sonli guvohnoma bilan Davlat ro‘yxatidan o‘tgan.

To‘plam elektron ko‘rinishda (pdf formatida) mualliflarga taqdim etiladi. To‘plamga kiritiladigan maqolalarning mazmuni, ulardagi statistik ma’lumotlar va me’yoriy hujjatlarning to‘g‘riligiga hamda har qanday fikr - mulohazalarga mualliflarning o‘zlari mas’ul hisoblanadilar. Talablarga javob bermaydigan maqolalar to‘plamga kiritilmaydi. Tashkiliy qo‘mita maqola matnini qisqartirish, qisman tuzatish kiritish, seksiyalarga joylashtirish huquqiga ega.

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AI AS A TOOL FOR DEVELOPING INTERCULTURAL WRITING COMPETENCE IN ENGLISH LANGUAGE TEACHER EDUCATION

Madraximova Muxlisa Shokir qizi,
Teacher at Urgench state pedagogical institute
E-mail: muxlisamadrahimova6@gmail.com
Kurbanniyozova Dinoraxon Shuxrat qizi,
Teacher at Urgench state pedagogical institute
E-mail: dinorakurbanniezova@gmail.com

Abstract. The rapid development of artificial intelligence (AI) technologies has significantly influenced educational practices, particularly in language teacher education. This article explores the potential of AI as a pedagogical tool for developing intercultural writing competence among pre-service English language teachers. Intercultural writing competence is understood as the ability to produce written texts that reflect linguistic accuracy, cultural awareness, critical thinking, and sensitivity to diverse audiences. The paper discusses theoretical foundations of intercultural communicative competence, digital pedagogy, and AI-assisted learning. It argues that AI tools such as intelligent writing assistants, feedback generators, and corpus-based systems can enhance students' awareness of cultural nuances, rhetorical conventions, and global communication practices. The study highlights both opportunities and challenges of integrating AI into teacher education programs and proposes methodological recommendations for effective implementation. The findings suggest that AI, when used critically and ethically, can become a powerful instrument for fostering reflective, culturally responsive, and globally competent English language teachers.

Keywords: Artificial Intelligence; intercultural competence; writing competence; teacher education; digital pedagogy; English language teaching; AI-assisted learning; global competence.

Аннотация. Стремительное развитие технологий искусственного интеллекта (ИИ) существенно влияет на современные образовательные практики, особенно в сфере подготовки учителей иностранных языков. В статье рассматривается потенциал ИИ как педагогического инструмента для развития межкультурной письменной компетенции будущих учителей английского языка. Межкультурная письменная компетенция понимается как способность создавать письменные тексты с учетом языковой точности, культурной осведомлённости, критического мышления и чувствительности к различным аудиториям. В работе анализируются теоретические основы межкультурной коммуникативной компетенции, цифровой педагогики и обучения с использованием ИИ. Обосновывается, что инструменты ИИ,

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такие как интеллектуальные помощники по письму, системы автоматической обратной связи и корпусные технологии, способствуют формированию у студентов понимания культурных различий, риторических норм и глобальных коммуникативных практик. Рассматриваются преимущества и вызовы интеграции ИИ в программы педагогического образования, а также предлагаются методические рекомендации по его эффективному использованию. Делается вывод о том, что при критическом и этичном применении ИИ становится эффективным средством формирования рефлексивных, культурно чувствительных и глобально компетентных учителей английского языка.

Ключевые слова: Искусственный интеллект; межкультурная компетенция; письменная компетенция; педагогическое образование; цифровая педагогика; обучение английскому языку; обучение с использованием ИИ; глобальная компетентность.

Annotatsiya. Sun’iy intellekt (SI) texnologiyalarining jadal rivojlanishi ta’lim amaliyotiga, ayniqsa, chet tillari o‘qituvchilarini tayyorlash jarayoniga sezilarli ta’sir ko‘rsatmoqda. Mazkur maqolada SI’ning bo‘lajak ingliz tili o‘qituvchilarida madaniyatlararo yozma kompetensiyani rivojlantirishdagi pedagogik vosita sifatidagi imkoniyatlari tahlil qilinadi. Madaniyatlararo yozma kompetensiya til aniqligi, madaniy xabardorlik, tanqidiy fikrlash va turli auditoriyalarga moslashish qobiliyatini o‘z ichiga oladi. Maqolada madaniyatlararo kommunikativ kompetensiya, raqamli pedagogika va SI yordamida o‘qitishning nazariy asoslari yoritiladi. SI asosidagi yozuv yordamchilari, avtomatik fikr-mulohaza tizimlari va korpus texnologiyalari talabalarda madaniy tafovutlar, ritorik an’analar va global kommunikatsiya amaliyotlari haqida chuqurroq tushuncha shakllantirishga xizmat qilishi asoslab beriladi. Shuningdek, SI’ni pedagogik ta’lim dasturlariga integratsiya qilishning imkoniyatlari va muammolari ko‘rib chiqilib, samarali joriy etish bo‘yicha metodik tavsiyalar beriladi. Tadqiqot natijalari SI’ning tanqidiy va etik yondashuv asosida qo‘llanilganda, global kompetent va madaniy jihatdan sezgir ingliz tili o‘qituvchilarini tayyorlashda samarali vosita bo‘lishini ko‘rsatadi.

Kalit so‘zlar: Sun’iy intellekt; madaniyatlararo kompetensiya; yozma kompetensiya; pedagogik ta’lim; raqamli pedagogika; ingliz tilini o‘qitish; SI yordamida o‘qitish; global kompetentlik.

1. INTRODUCTION

Globalization and digital transformation have reshaped the goals of English language teacher education. Modern English teachers are expected not only to demonstrate linguistic proficiency but also to possess intercultural awareness and the ability to guide learners in multicultural communication contexts. Writing, as a

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productive and cognitively demanding skill, plays a central role in expressing cultural meanings and identities.

At the same time, the emergence of AI-powered tools has introduced new possibilities for enhancing writing instruction. AI systems can analyze texts, provide instant feedback, suggest stylistic improvements, and simulate communication with diverse audiences. Therefore, integrating AI into teacher education programs presents an innovative pathway for developing intercultural writing competence.

THEORETICAL FOUNDATIONS

Intercultural Communicative Competence

The concept of Intercultural Communicative Competence (ICC) was introduced and systematically developed by the British scholar Michael Byram. According to Byram, learning a foreign language should not be limited to mastering grammatical structures and vocabulary; it should also involve understanding the cultural context in which the language is used. ICC emphasizes the ability of language learners to communicate effectively and appropriately with people from different cultural backgrounds. In this regard, intercultural competence becomes a key component of modern foreign language education.

Byram's model of intercultural communicative competence consists of several interconnected components: attitudes, knowledge, skills of interpreting and relating, skills of discovery and interaction, and critical cultural awareness**.** Attitudes refer to openness, curiosity, and respect toward other cultures. Knowledge includes an understanding of social groups, cultural practices, values, and communication norms in both one's own culture and the target culture. Skills of interpreting and relating enable learners to analyze and explain cultural phenomena and relate them to their own cultural experiences. Skills of discovery and interaction involve the ability to acquire new cultural knowledge and apply it in real communication. Finally, critical cultural awareness allows learners to evaluate cultural practices, perspectives, and values critically and objectively. Within the context of foreign language learning, these components help learners develop the ability not only to use language correctly but also to communicate in culturally appropriate ways. This is particularly important in academic and professional communication, where misunderstanding cultural norms may lead to misinterpretation or ineffective communication. Building upon Byram's theory, researchers have extended the concept of intercultural communicative competence to include intercultural writing competence. Writing in a foreign language is not only a linguistic activity but also a culturally shaped practice. Different cultures have distinct rhetorical traditions, discourse structures, and conventions that

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influence how ideas are organized and presented in written texts. Therefore, learners must develop the ability to recognize and adapt to these cultural differences when producing written discourse.

Intercultural writing competence involves several important aspects. First, learners need to understand rhetorical conventions typical of the target language, such as the organization of arguments, paragraph structure, and coherence patterns. For example, English academic writing often emphasizes clarity, directness, and logical progression of ideas, while other cultures may prefer more indirect or circular styles of expression. Second, learners should be aware of cultural references and background knowledge that shape meaning in written texts. Without this awareness, readers from different cultures may misinterpret the writer's intentions. Another essential element of intercultural writing competence is the use of politeness strategies and appropriate tone. Cultural norms strongly influence how writers express opinions, criticism, or disagreement. For instance, academic writing in English often requires careful hedging, the use of modal verbs, and respectful acknowledgment of other scholars' ideas. Understanding these conventions helps learners produce texts that meet the expectations of the target academic community. Furthermore, intercultural writing competence requires an awareness of the target audience**.** Writers must consider the cultural background, expectations, and communication styles of their readers. This includes choosing appropriate vocabulary, argumentation patterns, and examples that are understandable and relevant to the audience. Such awareness ensures that the written message is not only linguistically accurate but also culturally meaningful and effective.

In modern education, the development of intercultural communicative competence is closely connected with globalization, international academic communication, and the increasing use of English as a lingua franca. As students participate in international academic environments, publish research articles, and communicate with global audiences, intercultural writing competence becomes an essential skill. Therefore, integrating intercultural perspectives into foreign language teaching contributes to the formation of learners who are capable of communicating effectively, respectfully, and critically in multicultural contexts.

WRITING COMPETENCE IN TEACHER EDUCATION

Writing competence in teacher education is considered one of the essential professional skills that future educators must develop during their academic preparation. It goes beyond the simple mastery of grammatical rules and vocabulary and involves a complex set of abilities that allow teachers to communicate ideas clearly, logically, and appropriately in various educational

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contexts. In modern pedagogical practice, writing competence includes not only linguistic accuracy but also genre awareness, argumentation skills, academic integrity, and reflective practice.

First, grammatical accuracy remains a fundamental element of writing competence. Pre-service teachers must demonstrate the ability to use correct grammar, punctuation, spelling, and sentence structure in order to produce clear and understandable texts. Accurate language use ensures that the message is conveyed effectively and maintains professional credibility in academic and professional environments. However, grammatical correctness alone is not sufficient to produce high-quality academic writing. Another important component of writing competence is genre awareness. Academic and professional communication requires the ability to write in different genres, such as essays, research papers, lesson plans, reports, reflective journals, and professional correspondence. Each genre has its own structural conventions, stylistic features, and communicative purposes. For example, research articles require a clear structure including introduction, literature review, methodology, results, and discussion, while reflective writing focuses on personal experience and critical analysis. Therefore, teacher education programs should help students understand the characteristics of different genres and apply appropriate writing strategies in each context.

Argumentation skills also play a crucial role in developing writing competence. Future teachers need to learn how to formulate clear arguments, support their ideas with evidence, and organize their thoughts logically. Academic writing often requires the ability to analyze information, compare different perspectives, and present well-supported conclusions. Developing these skills enables pre-service teachers to participate in scholarly discussions and to guide their own students in critical thinking and academic writing. Another significant aspect of writing competence is academic integrity. In higher education, students must learn the principles of ethical writing, including proper citation, paraphrasing, and avoidance of plagiarism. Academic integrity helps maintain the credibility of scholarly work and encourages responsible use of information sources. Teacher education is particularly important in this regard because future teachers are expected not only to follow ethical writing practices themselves but also to teach these principles to their students. In addition to these elements, reflective practice is an integral part of writing competence in teacher education. Reflective writing allows pre-service teachers to analyze their learning experiences, evaluate teaching strategies, and develop professional self-awareness. Through reflective journals, portfolios, and written reflections, students learn to critically examine their own

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teaching practices and continuously improve their professional skills. Furthermore, writing competence in teacher education should prepare future teachers to produce culturally appropriate texts in various contexts, including academic, professional, and digital environments. In academic contexts, this includes writing research papers, essays, and reports that follow disciplinary conventions. In professional contexts, teachers must be able to prepare lesson plans, educational materials, and formal communication with colleagues and institutions. In digital contexts, writing competence extends to online communication, educational platforms, and digital collaboration tools.

Therefore, developing writing competence in teacher education requires an integrated approach that combines linguistic knowledge, academic skills, cultural awareness, and reflective thinking. By fostering these abilities, teacher education programs can prepare future educators who are capable of effective written communication and who can support the development of writing skills in their own students.

AI IN LANGUAGE EDUCATION

In recent years, artificial intelligence (AI) has become an important technological innovation in the field of education, particularly in foreign language teaching and learning. AI-based tools provide new opportunities for improving teaching methodologies, supporting individualized learning, and enhancing students' language skills. In language education, AI applications include automated writing evaluation systems, adaptive learning platforms, and conversational agents that assist learners in practicing and developing their linguistic competence.

One of the most widely used AI applications in language education is automated writing evaluation (AWE) systems. These systems analyze students' written texts using natural language processing and machine learning algorithms. They are capable of identifying grammatical errors, spelling mistakes, vocabulary misuse, and certain aspects of textual coherence and organization. By providing immediate feedback, automated writing evaluation tools allow learners to revise their texts and improve their writing performance. This process supports the development of writing competence by encouraging students to reflect on their errors and make corrections independently. Furthermore, such systems help teachers reduce the time required for routine assessment and focus more on higher-level aspects of writing, such as argumentation and content development. Another important application of artificial intelligence in language education is the use of adaptive learning platforms. These platforms use data-driven algorithms to analyze learners' progress and adjust learning materials according to their individual needs, abilities, and learning pace. Adaptive systems can recommend exercises, provide

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personalized feedback, and monitor students' performance over time. As a result, learners receive customized learning experiences that support their specific strengths and address their weaknesses. In the context of writing development, adaptive platforms may offer targeted grammar exercises, vocabulary practice, and writing tasks that correspond to the learner's proficiency level.

In addition, conversational agents and AI-powered chatbots have gained increasing attention in language learning environments. These tools simulate human-like interaction and allow learners to practice communication in a low-pressure environment. Conversational agents can support vocabulary development, grammar practice, and even certain aspects of written communication. They also provide immediate responses, which helps maintain learners' motivation and engagement. In some cases, AI chatbots can guide students through writing tasks, provide suggestions for improving sentences, or offer explanations of linguistic rules. AI technologies are particularly effective because they are capable of processing large datasets and identifying linguistic and stylistic patterns that may not be easily recognized through traditional methods. By analyzing large amounts of learner data, AI systems can detect common errors, track learning progress, and generate insights into language acquisition processes. This capability allows educators and researchers to better understand students' learning difficulties and design more effective instructional strategies. However, despite these advantages, the pedagogical value of AI tools depends on their critical and responsible integration into the educational process. AI technologies should be viewed as supportive tools rather than replacements for teachers. Passive reliance on automated systems may lead to superficial learning, reduced critical thinking, and limited development of independent writing skills. Therefore, educators must guide students in using AI tools thoughtfully and critically. Effective integration of AI in language education requires combining technological tools with sound pedagogical principles. Teachers play a crucial role in interpreting AI-generated feedback, encouraging students' reflective learning, and ensuring that technological tools support meaningful educational goals. When used appropriately, artificial intelligence can enhance language learning by providing personalized support, increasing learning efficiency, and expanding opportunities for practice and feedback.

AI as a Tool for Developing Intercultural Writing Competence.

Artificial intelligence technologies have increasingly been integrated into language education, offering new opportunities for the development of intercultural writing competence. In the context of foreign language learning, AI-based tools support learners not only in improving linguistic accuracy but also in understanding

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cultural differences in communication. By analyzing texts, generating examples, and providing feedback, AI systems can assist students in recognizing cultural variations in discourse, rhetorical structure, and communicative conventions. As a result, artificial intelligence can function as an effective pedagogical instrument for developing intercultural awareness and writing skills among pre-service teachers.

ENHANCING CULTURAL AWARENESS

One of the important contributions of artificial intelligence in language education is its ability to enhance learners' cultural awareness**.** AI tools can expose students to diverse discourse models originating from different cultural contexts. Through large linguistic databases and text generation capabilities, AI systems can present examples of writing styles used in various academic traditions. For instance, when learners compare argumentative essays written in Anglo-American rhetorical traditions with those influenced by Asian rhetorical styles, they may notice differences in the organization of ideas, levels of directness, and the way evidence is presented. In many Western academic contexts, particularly in English-language academic writing, arguments are often presented in a clear and linear structure, where the main thesis is introduced early and supported by logically organized evidence. In contrast, some Asian rhetorical traditions may emphasize a more indirect or circular approach to presenting ideas. By analyzing such differences with the support of AI-generated examples, students can develop a deeper understanding of how cultural norms influence written discourse. This awareness enables learners to adapt their writing to international academic standards and communicate more effectively with diverse audiences.

PROVIDING IMMEDIATE AND REFLECTIVE FEEDBACK

Another significant advantage of AI tools is their capacity to provide immediate and reflective feedback on students' written texts. AI-powered feedback systems can automatically analyze various aspects of writing, including grammar, vocabulary usage, cohesion, tone, and register. Instant feedback allows students to identify errors quickly and revise their texts accordingly, which contributes to more efficient learning and continuous improvement. Beyond correcting linguistic mistakes, some advanced AI systems can also detect expressions that may be culturally inappropriate or potentially misunderstood in international contexts. For example, certain idiomatic expressions, overly direct statements, or culturally specific references may not be suitable for a global audience. AI tools can highlight such issues and suggest alternative formulations that are clearer and more appropriate for intercultural communication. This type of feedback encourages students to reflect on the cultural implications of their language choices and to develop greater sensitivity to the expectations of international readers.

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Supporting Genre and Audience Adaptation-Artificial intelligence can also support the development of writing competence by helping learners adapt their texts to different genres and audiences**.** Modern AI systems often operate through prompt-based interactions that simulate real-life communication situations. Through these simulations, students can practice composing texts intended for different contexts, such as academic essays, professional reports, or intercultural communication scenarios.

For example, AI platforms can generate writing tasks that require students to prepare a formal email to an international colleague, write an academic abstract for a research paper, or compose a culturally appropriate response in an online discussion forum. Such scenario-based activities encourage learners to consider the expectations, background knowledge, and communication styles of their intended audience. As a result, students develop the ability to adjust their writing style, tone, and level of formality according to the communicative situation.

ENCOURAGING CRITICAL DIGITAL LITERACY

In addition to supporting writing development, the integration of artificial intelligence in teacher education also promotes critical digital literacy. Future teachers must not only learn how to use AI tools effectively but also understand their limitations, potential biases, and ethical implications. Since AI systems are trained on large datasets that may contain cultural biases or inaccuracies, users must critically evaluate the information and suggestions generated by these technologies. Integrating AI into coursework encourages students to reflect on important issues such as authorship, originality, academic integrity, and responsible technology use. For example, students can discuss the role of AI in academic writing, explore the boundaries between assistance and plagiarism, and analyze how technological tools influence the learning process. Developing such critical awareness is particularly important for pre-service teachers, who will later guide their own students in the responsible use of digital technologies.

In conclusion, artificial intelligence has significant potential to support the development of intercultural writing competence in language education. By enhancing cultural awareness, providing immediate feedback, facilitating genre adaptation, and encouraging critical digital literacy, AI tools can contribute to more effective and reflective learning. However, their successful implementation depends on thoughtful pedagogical integration and the active involvement of educators who guide students in using these technologies responsibly.

CONCLUSION. The rapid development of artificial intelligence technologies has significantly influenced various fields of education, including foreign language teaching and teacher preparation. In the context of English

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language teacher education, artificial intelligence offers new opportunities for improving the development of intercultural writing competence, which has become an essential skill in the era of globalization and international communication.

AI-based tools can support the learning process by providing immediate feedback, generating diverse discourse examples, and facilitating exposure to multiple cultural perspectives in written communication. Through these functions, artificial intelligence can help future teachers improve their linguistic accuracy, rhetorical awareness, and cultural sensitivity. Moreover, AI-assisted learning environments encourage reflective practice by allowing students to analyze their writing, revise their texts, and critically evaluate automated suggestions. At the same time, the integration of artificial intelligence into teacher education requires careful pedagogical planning. The effectiveness of AI tools does not depend solely on their technological capabilities but rather on how they are incorporated into the educational process. When used thoughtfully, AI can function as a supportive learning instrument that enhances students' engagement, promotes independent learning, and strengthens intercultural communication skills.

However, educators must also consider the ethical and pedagogical implications of using AI technologies in academic contexts. Issues such as academic integrity, algorithmic bias, data privacy, and potential overreliance on automated systems highlight the need for responsible and critical use of these tools. Teacher education programs should therefore emphasize ethical awareness, digital literacy, and critical evaluation of AI-generated content. Preparing future English language teachers for communication in a globalized world requires a balanced integration of technological innovation and human-centered educational values. Artificial intelligence should complement, rather than replace, the role of teachers and learners in the educational process. By combining AI-supported learning with reflective pedagogy and intercultural awareness, teacher education programs can equip future educators with the skills necessary to communicate effectively and responsibly in diverse international contexts.

In conclusion, artificial intelligence has considerable potential to transform English language teacher education by supporting the development of intercultural writing competence. Nevertheless, its successful implementation depends on thoughtful pedagogical design, ethical responsibility, and the active engagement of both teachers and learners in the learning process.

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