

## USING ARTIFICIAL INTELLIGENCE TO DEVELOP AUTONOMOUS METHODOLOGICAL COMPETENCE IN FUTURE ENGLISH TEACHERS

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**Annotation:** *Artificial intelligence has become an important component of modern education and teacher training. In recent years, AI-based technologies have been increasingly used in language learning, assessment, and methodological support. For pedagogical universities in Uzbekistan, the development of autonomous methodological competence in future English teachers is a relevant task, as modern teachers are expected to work independently, make methodological decisions, and continuously improve their professional skills. Autonomous methodological competence includes the ability to plan lessons, select teaching methods, evaluate learning outcomes, and reflect on teaching practice (Zimnyaya, 2017). Artificial intelligence can support the development of this competence by providing personalized learning opportunities, automated feedback, and tools for self-assessment (Goryachev, 2019). This article examines how artificial intelligence can be used to develop autonomous methodological competence in future English teachers and discusses its educational potential and limitations.*

**Key words:** *artificial intelligence; teacher education; autonomous learning; methodological competence; future English teachers; reflective practice; digital pedagogy; professional development.*

**Аннотация:** *Искусственный интеллект стал важной составляющей современного образования и подготовки педагогических кадров. В последние годы технологии искусственного интеллекта все чаще используются в обучении иностранным языкам, оценивании и методической поддержке. Для педагогических вузов Узбекистана развитие автономной методической компетентности будущих учителей английского языка является актуальной задачей, поскольку современный учитель должен уметь работать самостоятельно, принимать методические решения и постоянно совершенствовать свои профессиональные навыки. Автономная методическая компетентность включает умение планировать уроки, выбирать методы обучения, оценивать результаты обучения и осуществлять рефлексию педагогической деятельности (Зимняя, 2017). Искусственный интеллект может способствовать развитию данной компетентности за счет персонализированного обучения, автоматизированной обратной связи и средств самоконтроля (Горячев, 2019). В статье рассматриваются возможности*

*использования искусственного интеллекта для формирования автономной методической компетентности будущих учителей английского языка, а также анализируются его образовательный потенциал и ограничения.*

**Ключевые слова:** *искусственный интеллект; педагогическое образование; автономное обучение; методическая компетентность; будущие учителя английского языка; рефлексия; цифровая педагогика; профессиональное развитие.*

**Annotatsiya:** *Sun'iy intellekt zamonaviy ta'lim va pedagog kadrlarni tayyorlash tizimining muhim tarkibiy qismiga aylandi. So'nggi yillarda sun'iy intellektga asoslangan texnologiyalar chet tillarni o'qitish, baholash va metodik qo'llab-quvvatlash jarayonlarida keng qo'llanilmoqda. O'zbekistondagi pedagogika oliy ta'lim muassasalari uchun bo'lajak ingliz tili o'qituvchilarida avtonom metodik kompetensiyani shakllantirish dolzarb masala hisoblanadi, chunki zamonaviy o'qituvchi mustaqil ishlash, metodik qarorlar qabul qilish va kasbiy faoliyatini doimiy rivojlantirib borish qobiliyatiga ega bo'lishi kerak.*

*Avtonom metodik kompetensiya darslarni rejalashtirish, o'qitish usullarini tanlash, o'quv natijalarini baholash va pedagogik faoliyatni tahlil qilish ko'nikmalarini o'z ichiga oladi (Zimnyaya, 2017). Sun'iy intellekt shaxsiylashtirilgan ta'lim, avtomatlashtirilgan fikr-mulohaza va o'zini-o'zi baholash vositalari orqali ushbu kompetensiyani rivojlantirishga yordam beradi (Goryachev, 2019). Ushbu maqolada bo'lajak ingliz tili o'qituvchilarida avtonom metodik kompetensiyani rivojlantirishda sun'iy intellektdan foydalanish imkoniyatlari hamda uning ta'limiy salohiyati va cheklovlari yoritib berilgan.*

**Kalit so'zlar:** *sun'iy intellekt; pedagogik ta'lim; avtonom ta'lim; metodik kompetensiya; bo'lajak ingliz tili o'qituvchilari; refleksiya; raqamli pedagogika; kasbiy rivojlanish.*

## INTRODUCTION

The rapid development of digital technologies has significantly influenced modern education systems. Today, teachers are expected not only to possess subject knowledge but also to demonstrate independence, flexibility, and readiness for continuous professional development.

This is especially important for future English teachers, whose professional activity requires constant methodological adaptation. In the context of pedagogical education in Uzbekistan, the formation of autonomous methodological competence has become one of the key objectives of teacher training.

According to pedagogical researchers, methodological competence includes the ability to plan, organize, and evaluate the teaching process independently (Bim, 2018). Autonomy in teaching is closely connected with reflection, self-assessment, and responsibility for professional growth (Little, 2007).

At the same time, traditional approaches to teacher education do not always create sufficient conditions for developing autonomy. In this regard, artificial intelligence is considered a promising tool that can support independent learning, reflective practice, and methodological decision-making.

The relevance of this article is determined by the need to integrate artificial intelligence into teacher education in order to prepare autonomous and competent future English teachers.

### **THEORETICAL BACKGROUND OF AUTONOMOUS METHODOLOGICAL COMPETENCE.**

Methodological competence is an essential component of a teacher's professional competence. It includes knowledge of teaching methods, the ability to select appropriate instructional strategies, and skills of evaluating learning outcomes. In modern pedagogy, methodological competence is closely connected with autonomy, which emphasizes independence and self-regulation in professional activity.

Autonomous methodological competence refers to a teacher's ability to independently plan, implement, and analyze the teaching process. According to Zimnyaya (2017), autonomy in professional activity is based on reflection and conscious self-development. For future English teachers, methodological autonomy is particularly important, as language teaching requires flexibility and adaptation to learners' individual needs.

Researchers note that the development of autonomous methodological competence in teacher education requires learner-centered and practice-oriented approaches (Bim, 2018). Therefore, theoretical understanding of methodological autonomy serves as the foundation for integrating innovative educational tools, including artificial intelligence, into teacher training programs.

### **THE ROLE OF ARTIFICIAL INTELLIGENCE IN TEACHER EDUCATION.**

Artificial intelligence has become an important component of modern educational systems. In recent years, AI-based technologies have been actively introduced into higher education, including teacher training programs. Artificial intelligence is used to support personalized learning, automate assessment, provide feedback, and improve the quality of educational content. For pedagogical universities, the integration of artificial intelligence creates new opportunities for improving the professional preparation of future teachers.

In teacher education, artificial intelligence serves as a supportive and analytical tool rather than a replacement for traditional pedagogy. AI-based platforms can analyze students' learning behavior, identify strengths and weaknesses, and offer individualized recommendations.

This allows future English teachers to work independently, monitor their progress, and adjust their learning strategies. Such experiences contribute to the development of self-regulation and responsibility, which are essential components of autonomous methodological competence.

One of the key advantages of artificial intelligence in teacher education is the opportunity for reflective practice. AI tools can provide automated feedback on lesson plans, teaching materials, written reflections, and assessment tasks. By analyzing this feedback, student-teachers learn to evaluate their methodological decisions and improve them independently. This process supports critical thinking and encourages continuous professional development.

Artificial intelligence also supports practice-oriented learning through simulations and virtual teaching environments. Future English teachers can experiment with different teaching strategies, classroom management techniques, and assessment methods in a safe digital space.

These simulations help students gain practical experience and develop confidence in methodological decision-making before entering real classrooms. In the context of higher pedagogical education in Uzbekistan, artificial intelligence can play an important role in modernizing teacher training programs.

By integrating AI-based tools into methodological courses and teaching practice, universities can prepare future English teachers who are capable of working autonomously, using innovative technologies, and adapting to changing educational conditions.

#### **USING ARTIFICIAL INTELLIGENCE TO DEVELOP AUTONOMOUS METHODOLOGICAL COMPETENCE IN FUTURE ENGLISH TEACHERS.**

The development of autonomous methodological competence in future English teachers requires learning conditions that promote independence, reflection, and active decision-making. Artificial intelligence provides such conditions by offering tools that support self-directed learning and professional growth. Through regular interaction with AI-based educational platforms, student-teachers gradually learn to take responsibility for their methodological choices and teaching strategies. One of the main ways artificial intelligence contributes to methodological autonomy is through lesson planning support. AI-powered tools can suggest lesson structures, teaching activities, learning objectives, and assessment methods based on learners' needs and language levels. While using these tools, future English teachers are encouraged to analyze recommendations critically, adapt them to specific classroom contexts, and justify their methodological decisions. This process strengthens independent thinking and methodological awareness.

Artificial intelligence also plays an important role in developing reflective practice. Automated feedback systems allow student-teachers to receive immediate comments on lesson plans, teaching materials, and reflective journals. By analyzing this feedback, future teachers learn to identify methodological strengths and weaknesses without constant guidance from instructors. This encourages self-evaluation and supports the development of professional autonomy. Another significant contribution of artificial intelligence is the opportunity for personalized and adaptive learning. AI-based platforms adjust content and tasks according to individual

progress and learning needs. This helps future English teachers recognize their own learning gaps and work on them independently. As a result, students develop self-regulation skills and the ability to manage their professional development.

Virtual teaching simulations and digital classrooms powered by artificial intelligence also contribute to the development of autonomous methodological competence. These environments allow student-teachers to experiment with different teaching approaches, classroom management strategies, and assessment techniques. By analyzing simulated teaching outcomes, future teachers gain practical experience and confidence in making independent methodological decisions. In addition, artificial intelligence supports collaborative autonomy. While working individually with AI tools, student-teachers can also engage in group discussions, peer feedback, and joint reflection. AI-generated data and feedback serve as a basis for meaningful methodological discussions, helping students compare approaches and justify their choices. This combination of individual autonomy and collaborative learning is particularly valuable in teacher education.

Overall, artificial intelligence creates a learning environment in which future English teachers are not passive recipients of knowledge but active participants in their professional development. By supporting lesson planning, reflection, self-assessment, and practical experimentation, AI contributes significantly to the formation of autonomous methodological competence.

#### **CHALLENGES AND LIMITATIONS OF USING ARTIFICIAL INTELLIGENCE IN TEACHER EDUCATION.**

Despite the significant educational potential of artificial intelligence, its use in teacher education is associated with several challenges and limitations. One of the main concerns is the risk of over-reliance on AI-based tools. If future English teachers depend too much on artificial intelligence, they may reduce their ability to think critically, make independent methodological decisions, and demonstrate creativity in the teaching process.

Another important challenge is the insufficient level of digital literacy among some students and teachers. Not all future teachers possess the necessary skills to use artificial intelligence effectively and responsibly.

As a result, AI tools may be used superficially or incorrectly, which limits their educational value. This problem highlights the need for systematic training in digital and information competence within pedagogical universities.

Ethical issues also play an important role in the discussion of artificial intelligence in education. The use of AI raises questions related to data privacy, academic honesty, and the reliability of automatically generated feedback. Future English teachers must be trained to evaluate AI-generated information critically and to use such tools ethically and professionally.

In addition, artificial intelligence cannot replace human interaction, pedagogical intuition, and emotional intelligence, which are essential qualities of an effective

teacher. Therefore, AI should be considered as a supportive tool that enhances methodological competence rather than a substitute for pedagogical knowledge and teaching experience.

### **CONCLUSION.**

In conclusion, the integration of artificial intelligence into teacher education creates new opportunities for developing autonomous methodological competence in future English teachers. Artificial intelligence supports independent learning, reflective practice, lesson planning, self-assessment, and practical experimentation, which are essential components of professional teacher competence.

The study has shown that AI-based tools can help future English teachers become more responsible for their professional development, make informed methodological decisions, and adapt teaching strategies to different learning contexts. At the same time, effective use of artificial intelligence requires critical thinking, digital literacy, and ethical awareness.

Higher pedagogical institutions in Uzbekistan play a key role in preparing competent and autonomous English teachers. By integrating artificial intelligence into methodological training in a balanced and thoughtful way, universities can improve the quality of teacher education and respond to modern educational demands.

Thus, artificial intelligence can be considered a valuable assistant in forming autonomous, reflective, and professionally competent future English teachers.

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