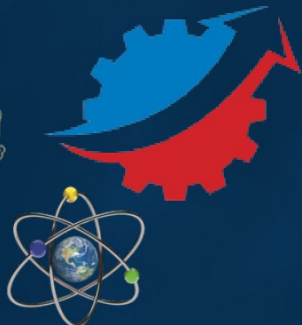


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*ijtimoiy-iqtisodiy, innovatsion texnik,  
fan va ta'limga oid ilmiy-amaliy jurnal*

**2026-YIL**  
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- 05.01.01 – Muhandislik geometriyasi va kompyuter grafikasi. Audio va video texnologiyalari
- 05.01.02 – Tizimli tahlil, boshqaruv va axborotni qayta ishlash
- 05.01.03 – Informatikaning nazariy asoslari
- 05.01.04 – Hisoblash mashinalari, majmualari va kompyuter tarmoqlarining matematik va dasturiy ta'minoti
- 05.01.05 – Axborotlarni himoyalash usullari va tizimlari. Axborot xavfsizligi
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- 05.01.07 – Matematik modellashtirish
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- 05.08.03 – Temir yo'l transportini ishlatish
- 05.08.06 – "G'ildirakli va gusenisali mashinalar va ularni ishlatish" (texnika fanlari)
- 05.09.01 – Qurilish konstruksiyalari, bino va inshootlar
- 05.09.04 – Suv ta'minoti. Kanalizatsiya. Suv havzalarini muhofazalovchi qurilish tizimlari
- 10.00.06 – Qiyosiy adabiyotshunoslik, chog'ishtirma tilshunoslik va tarjimashunoslik
- 10.00.04 – Yevropa, Amerika va Avstraliya xalqlari tili va adabiyoti
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- 08.00.02 – Makroiqtisodiyot
- 08.00.03 – Sanoat iqtisodiyoti
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# THE ROLE OF DIGITAL EDUCATIONAL TECHNOLOGIES IN DEVELOPING THE PROFESSIONAL COMMUNICATION CULTURE OF FUTURE TEACHERS

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**Annotation.** The rapid development of digital technologies has significantly transformed modern educational processes and created new opportunities for professional teacher training. This study examines the role of digital educational technologies in developing the professional communication culture of future teachers. Professional communication culture is considered an essential component of pedagogical competence, enabling teachers to establish effective interaction with students, colleagues, and parents. The research analyzes the pedagogical potential of digital platforms, virtual classrooms, online collaboration tools, and communication technologies in developing communicative skills.

**Keywords:** digital education, professional communication culture, future teachers, educational technologies, communicative competence, digital learning environment, pedagogical innovation.

**Annotatsiya.** Raqamli texnologiyalarning jadal rivojlanishi zamonaviy ta'lim jarayonlarini sezilarli darajada o'zgartirib, professional o'qituvchilarni tayyorlash uchun yangi imkoniyatlar yaratmoqda. Ushbu tadqiqot bo'lajak o'qituvchilarning professional muloqot madaniyatini rivojlantirishda raqamli ta'lim texnologiyalarining rolini o'rganishga bag'ishlangan. Professional muloqot madaniyati pedagogik kompetensiyaning muhim tarkibiy qismi sifatida qaralib, o'qituvchilarga o'quvchilar, hamkasblar va ota-onalar bilan samarali muloqot o'rnatish imkonini beradi. Tadqiqotda raqamli platformalar, virtual sinxonalar, onlayn hamkorlik vositalari va kommunikatsion texnologiyalarning muloqot ko'nikmalarini rivojlantirishdagi pedagogik salohiyati tahlil qilinadi.

**Kalit so'zlar:** raqamli ta'lim, professional muloqot madaniyati, bo'lajak o'qituvchilar, ta'lim texnologiyalari, kommunikativ kompetensiya, raqamli o'quv muhiti, pedagogik innovatsiya.

**Аннотация.** Быстрое развитие цифровых технологий значительно изменило современные образовательные процессы и создало новые возможности для профессиональной подготовки учителей. В данном исследовании рассматривается роль цифровых образовательных технологий в развитии профессиональной коммуникативной культуры будущих учителей. Профессиональная коммуникативная культура рассматривается как важнейший компонент педагогической компетентности, позволяющий учителям устанавливать эффективное взаимодействие с учащимися, коллегами и родителями. В исследовании анализируется педагогический потенциал цифровых платформ, виртуальных классов, инструментов онлайн-сотрудничества и коммуникационных технологий в развитии коммуникативных навыков.

**Ключевые слова:** цифровое образование, профессиональная коммуникативная культура, будущие учителя, образовательные технологии, коммуникативная компетентность, цифровая учебная среда, педагогические инновации.

## INTRODUCTION

The rapid advancement of digital technologies has significantly transformed the educational landscape and created new opportunities for teachers' professional development. This article explores the role of digital educational technologies in developing the professional communication culture of future teachers. Professional communication culture is a fundamental component of pedagogical competence that enables educators to interact effectively with students, colleagues, parents, and the wider educational community.

The study examines the potential of digital platforms, online collaboration tools, virtual learning environments, and interactive technologies in fostering communicative skills among prospective teachers. The research highlights the importance of integrating innovative pedagogical approaches with digital resources to enhance communicative competence, critical thinking, and professional behavior.

The findings suggest that digital educational technologies contribute significantly to the formation of effective communication practices and improve the overall quality of teacher preparation in higher education

institutions.

## LITERATURE REVIEW

The digital transformation of education has become one of the most significant trends of the twenty-first century. Advances in information and communication technologies have reshaped teaching methods, learning environments, and professional interactions within educational institutions. As future teachers are expected to work in technologically enriched environments, they must possess not only subject knowledge and pedagogical skills, but also a well-developed professional communication culture.

Professional communication culture refers to teachers' ability to communicate effectively, ethically, and professionally in various educational contexts. It encompasses verbal and non-verbal communication, digital interaction, collaboration, conflict resolution, and intercultural competence. In the digital age, communication increasingly takes place through online platforms, virtual classrooms, social networks, and educational management systems, making digital communication skills essential for future educators.

This study investigates how digital educational technologies contribute to the development of professional communication culture among future teachers and identifies effective pedagogical strategies for integrating these technologies into teacher education programs.

Researchers have emphasized the importance of communicative competence as a core component of teacher professionalism. According to contemporary educational theories, effective communication directly influences student engagement, learning outcomes, and classroom management. The integration of digital technologies into education has expanded the possibilities for communication by enabling real-time interaction, collaborative learning, and access to diverse educational resources.

## RESEARCH METHODOLOGY

This study employed theoretical research methods, including analysis and synthesis, comparative analysis, and generalization. Scientific literature, international research findings, and educational practices related to digital educational technologies and professional communication culture were examined. A systematic approach was used to evaluate the impact of digital learning environments, online collaboration tools, and communication technologies on the development of future teachers' communicative competence.

## ANALYSIS AND RESULTS

Studies indicate that digital tools such as Learning Management Systems (LMS), video conferencing platforms, online discussion forums, and collaborative applications promote active participation and professional interaction. These technologies facilitate communication beyond traditional classroom boundaries and encourage future teachers to develop the skills necessary for modern educational environments.

Furthermore, scholars argue that digital educational technologies support the development of reflective practice, self-assessment, and professional identity formation. Through online collaboration and communication activities, prospective teachers gain experience in managing professional relationships and engaging in constructive dialogue.

Professional communication culture plays a vital role in teacher preparation. Effective communication allows teachers to establish positive relationships with students, collaborate successfully with colleagues and administrators, communicate effectively with parents and stakeholders, resolve conflicts and misunderstandings professionally, create an inclusive and supportive learning environment, and adapt to multicultural and digital educational settings.

In contemporary education, communication extends beyond face-to-face interaction. Teachers must navigate digital communication channels responsibly and ethically. Therefore, developing professional communication culture requires systematic training and practical experience using modern communication technologies.

Digital educational technologies offer numerous opportunities for enhancing communicative competence among future teachers. Some of the most widely used technologies include Learning Management Systems, video conferencing technologies, collaborative digital tools, and professional online communities.

Learning Management Systems such as Moodle, Canvas, and Google Classroom facilitate communication between instructors and students. They support discussion forums, assignment feedback, collaborative projects, and information sharing.

Video conferencing applications such as Zoom, Microsoft Teams, and Google Meet enable synchronous



communication and virtual classroom experiences. Future teachers can practice public speaking, online instruction, and professional interaction through these platforms.

Collaborative tools such as Google Docs, Padlet, Trello, and Miro encourage teamwork and collaborative learning. These technologies help prospective teachers develop communication, negotiation, and leadership skills.

Professional communities on social media platforms provide opportunities for networking, knowledge exchange, and professional growth. Future teachers can engage with educational experts and participate in global discussions on teaching practices.

Several pedagogical approaches can enhance the effectiveness of digital educational technologies in teacher education. Collaborative learning activities require students to communicate, share ideas, and solve problems collectively. Digital technologies facilitate cooperation regardless of geographical location.

Project-based tasks encourage students to engage in meaningful communication while developing practical solutions to educational challenges. Online forums and virtual discussions promote critical thinking and communicative competence by allowing students to express opinions and evaluate diverse perspectives.

Digital portfolios and reflective journals help future teachers analyze their communication experiences and identify areas for improvement.

The integration of digital educational technologies into teacher education contributes positively to the development of professional communication culture. Students who actively engage in digital learning environments demonstrate improved communication skills, greater confidence in professional interactions, and enhanced collaborative abilities.

Digital technologies provide authentic opportunities for communication practice and allow future teachers to experience real-world educational scenarios. They also encourage continuous professional development by facilitating access to educational communities and professional networks.

However, successful implementation requires appropriate methodological support, digital literacy training, and institutional commitment. Teacher educators should design learning activities that intentionally develop communicative competence alongside technological skills.

## CONCLUSION AND RECOMMENDATIONS

Digital educational technologies have become indispensable tools in modern teacher education. They play a significant role in developing the professional communication culture of future teachers by providing opportunities for interaction, collaboration, reflection, and professional engagement. The effective integration of digital tools into educational programs enhances communicative competence and prepares prospective teachers for the demands of contemporary educational environments.

Higher education institutions should continue to improve methodological approaches that combine pedagogical innovation with digital technologies. In particular, it is recommended to integrate digital communication tools into teacher training curricula, develop students' digital literacy, organize online collaborative learning activities, and use virtual learning environments to strengthen professional communication skills. Such efforts will contribute to the preparation of competent, communicative, and technologically proficient educators capable of meeting the challenges of digital education.

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