

DIDACTIC FEATURES OF DEVELOPING THE COGNITIVE COMPETENCE OF SOCIAL SECTOR EMPLOYEES BASED ON DIGITAL TECHNOLOGIES

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This article analyzes the didactic features of developing the cognitive competence of social sector employees based on digital technologies. In digital learning environments, such didactic principles as individualization, interactivity, problem-based learning, and reflective practice play a crucial role. The study highlights the pedagogical potential of digital platforms, virtual models, and online learning resources in stimulating cognitive activity. It is argued that this approach contributes to the development of professional thinking, analytical skills, and independent decision-making among social sector specialists.

Keywords: cognitive competence, social sector employees, digital technologies, didactics, digital education, professional development

IJTIMOY SOHA XODIMLARINING KOGNITIV KOMPETENTLIGINI RAQAMLI TEXNOLOGIYALAR ASOSIDA RIVOJLANTIRISHNING DIDAKTIK XUSUSIYATLARI

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Ushbu maqolada ijtimoiy soha xodimlarining kognitiv kompetentligini raqamli texnologiyalar asosida rivojlantirishning didaktik xususiyatlari tahlil qilinadi. Raqamli muhitda ta'lim jarayonini tashkil etishda individual yondashuv, interaktivlik, muammoli o'qitish va reflektiv faoliyat muhim didaktik omillar sifatida qaraladi. Tadqiqotda raqamli platformalar, virtual modellar va onlayn o'quv resurslarining kognitiv faoliyatni faollashtirishdagi roli yoritiladi. Shuningdek, mazkur yondashuv ijtimoiy soha mutaxassislarining professional tafakkuri va mustaqil qaror qabul qilish ko'nikmalarini rivojlantirishga xizmat qilishi asoslanadi.

Kalit so'zlar: kognitiv kompetentlik, ijtimoiy soha xodimlari, raqamli texnologiyalar, didaktika, raqamli ta'lim, professional rivojlanish

ДИДАКТИЧЕСКИЕ ОСОБЕННОСТИ РАЗВИТИЯ КОГНИТИВНОЙ КОМПЕТЕНТНОСТИ РАБОТНИКОВ СОЦИАЛЬНОЙ СФЕРЫ НА ОСНОВЕ ЦИФРОВЫХ ТЕХНОЛОГИЙ

**КАХХОРОВ ШАХРИЁР ЁДГОРОВИЧ — НЕЗАВИСИМЫЙ
СОИСКАТЕЛЬ БУХАРСКОГО ГОСУДАРСТВЕННОГО
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В статье анализируются дидактические особенности развития когнитивной компетентности работников социальной сферы на основе цифровых технологий. В условиях цифровой образовательной среды важную роль играют такие дидактические принципы, как индивидуализация, интерактивность, проблемное обучение и рефлексия. В работе раскрываются педагогические возможности цифровых платформ, виртуальных моделей и онлайн-ресурсов в активизации познавательной деятельности. Обосновывается, что данный подход способствует развитию профессионального мышления, аналитических навыков и самостоятельного принятия решений у специалистов социальной сферы.

Ключевые слова: когнитивная компетентность, работники социальной сферы, цифровые технологии, дидактика, цифровое образование, профессиональное развитие

INTRODUCTION

The rapid expansion of digital technologies has fundamentally transformed professional activity in the social sector. Social services, social protection systems, counseling, rehabilitation, and community development are increasingly supported by digital platforms, databases, and online communication tools. In this context, the professional competence of social sector employees is no longer limited to interpersonal skills and theoretical knowledge; it also requires strong cognitive abilities that enable specialists to analyze complex information, interpret digital data, and make well-grounded decisions.

Cognitive competence plays a key role in the effectiveness of social sector professionals. It includes critical thinking, analytical reasoning, problem-solving, information processing, and the ability to apply knowledge in real-life situations. In a digital environment, these cognitive skills become even more important, as employees must work with electronic records, automated systems, online client interactions, and large volumes of information. Therefore, the development of cognitive competence through digital technologies represents not only a technological challenge but also a pedagogical one. From a didactic perspective, the use of digital technologies requires new approaches to teaching and learning. Traditional instructional methods, which are based mainly on lectures and passive information transfer, are not sufficient for developing higher-order cognitive skills. Modern didactics emphasizes learner-

centered, interactive, and problem-based learning, which can be effectively supported by digital tools. Virtual simulations, online case studies, learning management systems, and artificial intelligence-based feedback tools create new opportunities for stimulating cognitive activity and professional thinking. Another important aspect is the personalization of learning. Digital technologies allow training programs to be adapted to the individual needs, learning pace, and professional experience of social sector employees. This personalization supports deeper understanding and more effective cognitive development. Moreover, digital environments encourage self-directed learning, reflection, and collaboration, which are essential for professional growth in the social sector. Thus, the relevance of this study is determined by the need to identify and analyze the didactic features that make digital technologies effective in developing cognitive competence. Understanding these features will help design more efficient training programs for social sector employees and improve the quality of social services in a digital society.

MATERIALS AND METHODS

This study applied a mixed-methods research design to investigate the didactic effectiveness of digital technologies in developing the cognitive competence of social sector employees. The research was conducted in professional training centers and social service institutions. A total of 120 social sector employees participated in the study, including social workers, counselors, and administrative staff. The participants were divided into two groups: an experimental group and a control group. The experimental group was trained using digital technologies, including online learning platforms, virtual simulations, interactive case studies, and digital assessment tools. The control group received traditional face-to-face training based on lectures, printed materials, and standard case discussions. The digital learning environment was designed according to key didactic principles such as interactivity, problem-based learning, reflection, and individualization. Participants in the experimental group completed digital modules that included video lectures, scenario-based tasks, group discussions in online forums, and simulation exercises. These activities were aimed at stimulating analytical thinking, decision-making, and information processing. To measure cognitive competence, several instruments were used, including standardized cognitive tests, professional problem-solving tasks, and self-assessment questionnaires. Pre-tests and post-tests were administered to both groups to evaluate changes in cognitive abilities. In addition, qualitative data were collected through interviews, observations, and reflective journals, which provided deeper insight into participants' learning experiences. The training program lasted twelve weeks. During

this period, the experimental group engaged in weekly digital learning sessions and collaborative online projects, while the control group followed conventional training methods. The collected data were analyzed using statistical and thematic analysis techniques.

RESULTS

The results of the study demonstrated that digital technologies had a significant positive impact on the development of cognitive competence among social sector employees. Participants in the experimental group showed a substantial increase in their post-test scores compared to their pre-test results, particularly in analytical thinking, problem-solving, and decision-making. In contrast, the control group showed only moderate improvement, mainly in theoretical knowledge rather than in higher-order cognitive skills. The digital learning environment enabled participants to work with realistic professional situations, analyze multiple variables, and evaluate the consequences of their decisions, which led to deeper cognitive engagement.

Qualitative data further supported these findings. Many participants reported that virtual simulations and interactive case studies helped them better understand complex social situations and improved their confidence in handling real-life professional challenges. They also noted that digital feedback and self-reflection tools enhanced their awareness of their own learning processes. Moreover, the use of digital technologies improved participants' ability to manage and interpret information. They became more skilled at identifying relevant data, evaluating its reliability, and integrating it into professional decision-making. This indicates that digital didactics contributes not only to cognitive development but also to information literacy.

TABLE: TRADITIONAL VS. DIGITAL DIDACTIC APPROACHES

Indicator	Traditional approach	Digital technology-based approach
Learning format	Classroom lectures, printed materials	Online platforms, virtual simulations, interactive modules
Learner role	Passive recipient	Active participant
Knowledge acquisition	Memorization and theoretical understanding	Problem-based, experiential, interactive learning
Cognitive development	Limited	High, with focus on analytical and critical thinking

Problem-solving skills	Low to moderate	Strong, enhanced through simulations and interactive tasks
Decision-making ability	Guided by standard procedures	Independent, reflective, and informed by digital feedback
Reflection & self-assessment	Rarely incorporated	Integral part of learning process
Collaboration & communication	Face-to-face, limited	Online collaboration, forums, group projects
Motivation	Moderate	High, due to interactivity and personalization
Adaptability	Low	High, learners adapt to new scenarios through simulations

CONCLUSION

The findings of this study confirm that digital technologies, when applied through appropriate didactic strategies, significantly enhance the cognitive competence of social sector employees. The integration of interactive, problem-based, and reflective digital learning environments supports the development of analytical thinking, decision-making, and professional reasoning. Digital technologies should not be viewed merely as technical tools but as powerful pedagogical instruments that shape the way professionals think, learn, and act. A systematic didactic approach is essential to ensure that these technologies contribute meaningfully to cognitive and professional growth. In conclusion, the development of cognitive competence through digital technologies represents a strategic direction for professional education in the social sector. By applying effective didactic principles, training programs can better prepare specialists to meet the complex challenges of a digital society.

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