

4. González-Martínez, J. A., Bote-Lorenzo, M. L., Gómez-Sánchez, E., & Cano-Parra, R. (2015). Cloud computing and education: A state-of-the-art survey. *Computers & Education*, 80, 132-151.
5. Ithantola, P., Ahoniemi, T., Karavirta, V., & Seppälä, O. (2010). Review of recent systems for automatic assessment of programming assignments. *Proceedings of the 10th Koli Calling International Conference on Computing Education Research*, 86-93.
6. Jordan, S. (2013). E-assessment: Past, present and future. *New Directions in the Teaching of Physical Sciences*, 9(1), 87-106.
7. Shermis, M. D., & Burstein, J. (Eds.). (2013). *Handbook of Automated Essay Evaluation*. Routledge.
8. Vasilev, J., & Valcheva, D. (2021). Cloud computing in e-learning: A review. *IOP Conference Series: Materials Science and Engineering*, 1031(1), 012120.

PECULIARITIES OF TEACHING IN THE WAR ENVIRONMENT

Pantileienko K.S., Senior Lecturer

Dnipro State Agrarian and Economic University, Dnipro, Ukraine

Abstract The military conflict in Ukraine has significantly transformed the educational process at all levels of education. Educational institutions have been forced to adapt to unprecedented challenges associated with security threats, psychological stress, forced migration, infrastructure destruction, and the widespread implementation of distance learning technologies. The purpose of this study is to analyze the peculiarities of teaching in a war environment and identify effective approaches that ensure the continuity and quality of education under crisis conditions. The research is based on the analysis of scientific literature, educational practices, and current challenges faced by teachers and students during wartime. The study reveals that successful teaching in war conditions requires flexible instructional strategies, digital competence, psychological support, and the integration of innovative educational technologies. The findings demonstrate that resilience, adaptability, and student-centered approaches are essential components of effective teaching in emergency situations. The article emphasizes the importance of institutional support, professional development of teachers, and the creation of safe educational environments for maintaining educational quality during military conflicts.

Education plays a crucial role in maintaining social stability, supporting personal development, and preserving national identity during periods of crisis. Armed conflicts significantly disrupt educational processes, creating challenges for students, teachers, educational institutions, and policymakers. The ongoing war in Ukraine has demonstrated the necessity of developing effective educational models capable of

functioning under conditions of uncertainty, danger, and continuous social transformation.

The war has affected all aspects of educational activity, including classroom instruction, student assessment, academic communication, and institutional management. Educational institutions have faced frequent interruptions caused by air raid alerts, power outages, displacement of students and teachers, and damage to educational infrastructure. These circumstances require the implementation of innovative teaching approaches that ensure both educational continuity and student well-being.

The relevance of this research is determined by the need to identify effective teaching strategies that can support educational quality in wartime conditions. Understanding the peculiarities of teaching during military conflict contributes to the development of sustainable educational systems capable of responding to future emergencies.

The purpose of this article is to examine the specific characteristics of teaching in a war environment, identify major challenges, and determine effective practices for ensuring educational continuity and quality.

The research is based on theoretical analysis of scientific publications, reports of international educational organizations, and contemporary studies related to education in emergency situations. Comparative analysis was used to evaluate different approaches to teaching under crisis conditions and to identify factors influencing educational effectiveness during wartime.

The study also employs a systematic approach that considers educational processes as interconnected systems involving teachers, students, institutions, and external social factors. Special attention is given to the analysis of digital learning technologies, psychological support mechanisms, and adaptive teaching methodologies.

Teaching during wartime is associated with numerous challenges that significantly influence educational effectiveness.

One of the most serious problems is the threat to physical safety. Air raids, missile attacks, and military operations frequently interrupt educational activities and create stressful learning conditions. Teachers and students must continuously adapt to changing circumstances while maintaining academic performance.

Psychological stress represents another critical challenge. Many students experience anxiety, fear, uncertainty, and emotional exhaustion caused by war-related events. Teachers themselves often face similar psychological difficulties while simultaneously providing emotional support to their students.

Forced displacement and migration have also affected educational processes. Many students have relocated to different regions or countries, resulting in diverse educational experiences and varying levels of access to learning resources. These circumstances require flexible teaching methods capable of addressing heterogeneous student needs.

Technological challenges further complicate the educational process. Interruptions in electricity supply, unstable internet connections, and limited access to digital devices may reduce the effectiveness of online learning. Educational institutions must therefore develop alternative instructional strategies that ensure continuity under adverse conditions.

The war environment has accelerated the transformation of traditional teaching practices. One of the most significant developments has been the widespread adoption of distance and blended learning models.

Online platforms such as Moodle, Google Classroom, Microsoft Teams, and Zoom have become essential tools for educational communication and content delivery. These technologies enable teachers to maintain interaction with students regardless of geographical location and security conditions.

Flexibility has become a key principle of educational organization. Teachers increasingly adapt deadlines, assessment procedures, and instructional methods to accommodate students' individual circumstances. Such flexibility contributes to maintaining student motivation and reducing academic stress.

Student-centered learning approaches have proven particularly effective during wartime. These approaches emphasize individual learning needs, emotional support, active participation, and personalized educational pathways. By focusing on students' experiences and well-being, teachers can create more supportive and productive learning environments.

Project-based learning and collaborative activities also contribute to educational engagement. These methods encourage critical thinking, problem-solving, communication, and teamwork skills while helping students maintain a sense of purpose and social connection.

Psychological support has become an integral component of teaching in the war environment. Educational activities cannot be effective when students experience significant emotional distress or trauma.

Teachers increasingly perform functions that extend beyond traditional instruction. They provide emotional support, facilitate communication, identify signs of psychological difficulties, and create safe educational environments. Empathy, emotional intelligence, and effective communication skills have become essential professional competencies for educators.

Educational institutions should establish comprehensive psychological support systems involving counselors, psychologists, social workers, and trained teaching staff. Such systems contribute to students' emotional resilience and improve their ability to cope with stress.

The integration of social and emotional learning into educational programs may further enhance students' psychological well-being. Activities promoting self-awareness, emotional regulation, resilience, and interpersonal communication help students adapt more effectively to challenging circumstances.

The war has accelerated digital transformation in education. Technologies that were previously supplementary have become fundamental components of educational delivery.

Digital learning resources provide flexibility and accessibility. Recorded lectures, electronic textbooks, interactive assignments, and virtual laboratories allow

students to continue learning despite interruptions caused by security concerns or infrastructure limitations.

Artificial intelligence, adaptive learning systems, and educational analytics offer new opportunities for personalized education. These technologies enable teachers to monitor student progress, identify learning difficulties, and provide targeted support.

However, successful digital transformation requires continuous professional development. Teachers must acquire digital competencies that allow them to effectively use technological tools and adapt educational content to online formats.

Institutional support is equally important. Educational organizations should invest in technological infrastructure, cybersecurity, digital resources, and professional training programs to ensure sustainable implementation of educational innovations.

The analysis demonstrates that effective teaching in the war environment depends on the interaction of multiple factors, including flexibility, digital competence, psychological support, and institutional resilience.

Educational institutions that successfully adapted to wartime conditions typically implemented blended learning models, strengthened communication systems, and prioritized student well-being. Teachers who demonstrated adaptability and innovative thinking were better able to maintain educational quality despite numerous challenges.

The findings indicate that psychological support significantly influences learning outcomes and student engagement. Educational strategies focused exclusively on academic performance may be insufficient under wartime conditions. Comprehensive approaches addressing both educational and emotional needs appear more effective.

The study also confirms the importance of digital technologies in ensuring educational continuity. However, technology alone cannot guarantee successful learning. Effective teaching requires meaningful interaction, pedagogical competence, and supportive educational relationships.

Teaching in the war environment represents a complex professional challenge requiring flexibility, resilience, and continuous adaptation. The ongoing military conflict has transformed educational practices and highlighted the importance of

innovative approaches capable of ensuring educational continuity under crisis conditions.

The study demonstrates that successful teaching during wartime depends on the integration of digital technologies, student-centered methodologies, and comprehensive psychological support. Teachers play a critical role not only as educators but also as facilitators of emotional resilience and social stability.

The findings emphasize the necessity of strengthening institutional support systems, investing in digital infrastructure, and promoting the professional development of educators. Future research should focus on long-term educational outcomes of wartime teaching practices and the development of sustainable models for education in emergency situations.

References

1. UNESCO. *Education in Emergencies: Guidance Notes for Education Systems*. Paris: UNESCO Publishing, 2023.
2. UNICEF. *The Impact of Armed Conflict on Children's Education*. New York: UNICEF, 2023.
3. OECD. *Education at a Glance 2024: OECD Indicators*. Paris: OECD Publishing, 2024.
4. Bozkurt, A., Sharma, R. *Emergency Remote Teaching in a Time of Global Crisis Due to Coronavirus Pandemic*. *Asian Journal of Distance Education*, 2020, Vol. 15(1), pp. 1–6.
5. Hodges, C., Moore, S., Lockee, B., Trust, T., Bond, A. *The Difference Between Emergency Remote Teaching and Online Learning*. *EDUCAUSE Review*, 2020.
6. Daniel, S.J. *Education and the COVID-19 Pandemic*. *Prospects*, 2020, Vol. 49, pp. 91–96.
7. Dryden-Peterson, S. *Refugee Education: Education for an Unknowable Future*. *Curriculum Inquiry*, 2017, Vol. 47(1), pp. 14–24.
8. Winthrop, R., Kirk, J. *Learning for a Bright Future: Schooling, Armed Conflict and Children's Well-Being*. *Comparative Education Review*, 2008, Vol. 52(4), pp. 639–661.
9. UNESCO Institute for Statistics. *Global Education Monitoring Report 2024*. Paris: UNESCO, 2024.
10. Schleicher, A. *The State of School Education: One Year into the COVID Pandemic*. OECD Publishing, 2021.