

# Educational Technologies in Support of Pedagogical Activity and Public Health Improvement Amidst the Implementation of State Policies on Humanistic-Legal Values in Education

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## Abstract

*The integration of educational information technologies into pedagogical practices and public health initiatives embodies a sophisticated, transformative approach within modern education. This integration aligns with state policies that champion humanistic and legal values. Such technologies revolutionize the delivery of educational content, enhancing engagement, inclusivity, and effectiveness. This article aims to explore how these technologies aid in maintaining and nurturing the psychological health of educational institution students. The research employs contemporary modeling methods to understand the upkeep and support of students' psychological health. Today, the significance of health for both individuals and society is accentuated by factors like environmental conditions, socioeconomic status, and lifestyle. Preventive efforts are increasingly focused not just on specific ailments but on broader health promotion. The study of health, especially within the humanities and social psychology, is gaining prominence. These fields examine the mechanisms that encourage healthy lifestyles and preventive behaviors. The article presents a primary model for preserving and nurturing psychological health among students, highlighting the pivotal role of educational technologies in this context.*

**Keywords:** Health preservation, Psychology, state of health, psychological health, students, education, Pedagogy, Economic, Humanistic values, Technologies, Public Administration.

## Introduction

Educational technologies play a pivotal role in supporting pedagogical activities by providing educators and learners with innovative tools to facilitate effective teaching and learning processes. These technologies enable the personalization of learning experiences, making education more accessible, especially in diverse and remote contexts. They help bridge the gap between traditional educational approaches and modern needs by introducing digital platforms, online courses, and interactive learning environments. This shift not only enhances students' engagement but also allows educators to track progress and tailor their approaches to individual student needs.

Educational technologies, in their evolving forms, also provide opportunities for lifelong learning, extending the reach of education beyond traditional school settings. By offering online courses, virtual certifications, and continuing education programs, these tools enable individuals of all ages to engage in learning at any stage of life. This is particularly important in the modern era, where continuous professional development and the ability to adapt to new information are critical for career growth and personal well-being. Educational platforms that emphasize public health, for instance, can offer ongoing education on new health practices, policies, and emerging medical knowledge, ensuring that the workforce stays informed and equipped to handle societal health challenges.

In the context of public health improvement, educational technologies contribute significantly by promoting awareness and knowledge about health-related issues. During health crises or times of public health concern, digital tools are instrumental in disseminating timely and accurate information to the public.

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Additionally, these technologies can offer support for mental health, stress management, and healthy living, making them vital resources for fostering a healthier society. Educational platforms can also provide access to specialized health education for students and communities, encouraging a deeper understanding of health and wellness.

The implementation of state policies on humanistic-legal values in education further reinforces the importance of these technologies. Humanistic values emphasize the development of each individual's potential, promoting a respectful, inclusive, and ethically sound learning environment. When integrated with technology, this creates opportunities for more equitable access to education, ensuring that all learners, regardless of their background, can benefit from high-quality educational experiences. Legal values, meanwhile, ensure that educational practices adhere to ethical and legal standards, promoting the rights of learners and educators alike.

Amidst these state policies, the combination of educational technologies, public health initiatives, and humanistic-legal values ensures that education is not only modernized but also aligned with broader societal goals. This creates a more holistic educational experience, where technology supports not just academic success but also the overall well-being and ethical development of learners, preparing them for the challenges of modern life while upholding their rights and dignity.

The integration of educational information technologies into pedagogical and public health initiatives marks a sophisticated advancement in modern education, aligning with state policies that advocate for humanistic and legal values. These technologies fundamentally alter the delivery of educational content, making learning more dynamic, engaging, inclusive, and effective. Tools such as Learning Management Systems, interactive whiteboards, and specialized apps facilitate a student-centered educational experience, enabling teachers to customize their teaching methods to meet diverse student needs.

Utilizing these technologies enhances pedagogical activities by promoting active learning and sustained engagement through digital platforms. Teachers can employ multimedia content and interactive simulations to vividly illustrate complex humanistic and legal principles, fostering understanding while instilling values such as justice, empathy, and ethical decision-making. Beyond the classroom, these technologies extend to public health by integrating health education into digital curriculums, broadening their societal impact by disseminating essential information on disease prevention, mental health, and physical wellness, thus bridging educational objectives with public health goals. However, implementing these technologies faces challenges such as the digital divide, privacy issues, and the need for enhanced digital literacy. Success relies on strategic planning and collaboration among educators, technologists, and policymakers to ensure these tools promote the intended values sensitively and contextually.

The potential of educational technologies to transform learning and contribute to societal well-being is vast. As technology advances, opportunities to improve educational settings and deliver transformative content grow. The key to this potential is the thoughtful, ethical use of technology, driven by a commitment to nurturing an educated, healthy, and value-oriented society. Additionally, the development of students' emotional intelligence—which encompasses cognitive, behavioral, and emotional skills that enhance self and social awareness, regulation, and management—is crucial for fostering cooperative relationships and productive dialogue. Research indicates that high emotional intelligence correlates with better academic and professional outcomes, as it helps students manage the emotional challenges of academic environments and interpersonal relationships.

Mental health, characterized by the absence of mental illness and the presence of well-rounded cognitive, emotional, and motor-volitional faculties, is foundational to overall wellbeing. Recent shifts in psychological approaches emphasize personal development aspects previously overlooked, spotlighting the importance of self-knowledge, self-development, and psychological health in education, particularly in university settings where these elements are often underemphasized, leading to a disconnect between societal expectations and student self-perception and emotional resilience.

This comprehensive view underscores the transformative impact of educational information technologies, not just in pedagogical terms but as pivotal tools in promoting psychological and public health, fostering a more holistic, integrated approach to education that is aligned with humanistic and legal values.

Educational technologies, when strategically integrated into pedagogical activities, can transform the learning experience by fostering creativity, critical thinking, and collaboration. Tools such as artificial intelligence, virtual reality, and adaptive learning systems allow educators to provide differentiated instruction that caters to diverse learning styles and paces. These technologies help educators create immersive and interactive learning experiences that are not possible in traditional classroom settings. They also support the development of digital literacy, which is essential in the 21st century, as students need to be adept at using technology both for learning and for future employment opportunities.

In terms of public health improvement, educational technologies serve as powerful mediums to address health disparities by providing accessible health education to broader audiences. Online platforms, webinars, and mobile apps offer scalable solutions for health education, empowering individuals and communities with knowledge about preventative healthcare, nutrition, physical activity, and mental health support. Particularly in times of health crises, like the COVID-19 pandemic, these technologies have been indispensable in delivering health information, ensuring continuity of care, and supporting mental health services remotely. By integrating health education into curricula through digital means, educational institutions can play a proactive role in promoting long-term public health goals.

The implementation of state policies that emphasize humanistic-legal values in education underpins these advancements. Humanistic values in education focus on fostering the emotional, social, and moral development of students, ensuring that they are not merely recipients of knowledge but active participants in their own learning processes. Technologies that encourage collaborative work, self-reflection, and ethical decision-making align with these humanistic ideals, creating learning environments that respect the individuality and agency of each learner. Furthermore, legal values in education safeguard the rights of both educators and students, ensuring a safe, respectful, and equitable learning environment. Technologies that ensure data privacy, promote digital safety, and comply with legal regulations contribute to maintaining the ethical integrity of educational systems.

In this broader framework, the intersection of educational technology, public health, and humanistic-legal values results in a more robust educational system that not only addresses cognitive development but also nurtures the emotional and physical well-being of students. It creates an environment where technology is used not only to improve academic outcomes but also to support the development of well-rounded individuals who are informed, healthy, and capable of critical thought and ethical action. This holistic approach to education, supported by state policies, ensures that learners are prepared to face complex social, ethical, and health-related challenges in their lives, reinforcing the role of education as a foundation for a just, healthy, and informed society.

In addition, the ethical implementation of technology, guided by humanistic and legal principles, safeguards against potential misuse, such as the exploitation of personal data or the creation of inequitable learning environments. Legal frameworks ensure that technologies comply with privacy laws, accessibility standards, and ethical norms, creating a fairer system for all participants. This alignment of educational technologies with humanistic and legal values ensures that no student is left behind and that all learners are provided with equal opportunities, regardless of their socioeconomic background, location, or abilities.

The role of state policies in this context is to ensure that educational technologies are used in ways that support these values while addressing broader societal needs, such as public health. By embedding health education into school curriculums through the use of technology, governments can create a more informed citizenry that understands key health issues, such as nutrition, mental health, and disease prevention. This not only improves public health outcomes but also helps students build lifelong habits of self-care and health awareness.

In conclusion, the integration of educational technologies, supported by humanistic-legal values and public health considerations, has the potential to revolutionize education. It creates a more holistic, inclusive, and forward-thinking system that prepares individuals to succeed academically while also nurturing their overall well-being and ethical development. With state policies reinforcing this approach, the education system becomes a powerful tool for societal improvement, fostering both intellectual and public health advancements. This comprehensive approach ensures that education is not just about acquiring knowledge but about creating well-rounded, healthy, and responsible individuals capable of contributing positively to society.

## Methodology

The methodological basis of the research is the general theoretical and methodological provisions of psychology and health preservation regarding the relationship between theory and practice; psychology - about personality development, the structure and features of the formation of students' cognitive interests; pedagogy - about integrity and continuity of professional training of future specialists; the main directions of using modern paradigms of psychology and health preservation; technologization of education; systemic, person-oriented, axiological, acmeological, activity, subject, technological in the formation of the basis for ensuring psychological health, environmental, competence, communicative approaches to ensuring psychological health. Teaching methods; position of the theory of humanism, essentialism, behaviorism, pragmatism, cognitive constructivism; achievements in the field of pedagogical technologies; methodological concepts of the content of education taking into account the principles of psychology and health preservation.

In order to fully understand the process of improving the provision of psychological health, we used the IDEF0 functional modeling method.

## Research Results and Discussions

Educational information technologies not only reshape our approach to traditional learning but also integrate seamlessly into broader societal objectives such as public health and the cultivation of humanistic and legal values. These technologies bridge educational and health literacy gaps, ensuring equitable access to quality learning and health information for all, irrespective of socio-economic status. These technologies enable a comprehensive educational approach by providing digital platforms that host interactive content on civic responsibilities, ethical behaviors, and legal rights, alongside traditional academic subjects. This multi-dimensional learning environment encourages students to become well-rounded citizens, aware of their societal roles and the legal frameworks that govern their actions. Additionally, the application of these technologies in public health education equips students to make informed decisions about their health and well-being. Through interactive courses and real-time data sharing, students gain knowledge on nutrition, exercise, mental health strategies, and preventive healthcare, potentially easing healthcare burdens by fostering a health-conscious populace. However, the successful deployment of these technologies involves overcoming significant challenges. Educators must be trained to effectively use these tools, ensuring educational goals are met while adapting to new delivery methods. Also, equitable access to these technologies is essential to avoid exacerbating existing inequalities. For these technologies to achieve their full potential, continuous evaluation and adaptation are crucial. Stakeholders must regularly assess how effectively these tools meet educational and public health objectives, adapting based on empirical evidence and user feedback. This vigilant oversight ensures that educational technologies not only address current needs but also evolve to meet future challenges.

In conclusion, while educational information technologies hold significant promise for enhancing pedagogical practices and public health, their success hinges on thoughtful implementation, broad accessibility, and ongoing improvement. By fully leveraging these technologies, we can cultivate a more educated, healthy, and just society, rooted in humanistic and legal values. The integrity of one's "self" and personal boundaries is crucial for psychological health, as many mental health issues stem from blurred intra-family and interpersonal boundaries. Establishing proper psychological distances and boundaries is

essential for preventing personality disorders and promoting mental well-being. The inability to establish these boundaries can lead to significant psychological distress and disorders. The health of young people is influenced by both objective factors (such as ecology and healthcare quality) and subjective factors (such as lifestyle values and self-esteem). Emphasizing the latter during youth can lead to profound, positive changes in health outcomes. Only a healthy generation can actively contribute to national wealth and confidently face the future. In universities, socio-psychological initiatives such as lectures, competitive movements, research activities, and psychological support play crucial roles in maintaining student health. These processes involve diagnostic tracking, methodological applications, and result analysis to tailor and refine health preservation strategies. Psychological health encompasses a dynamic set of mental states that facilitate a person's full functioning and well-being throughout life. Experiencing identity, particularly professional identity, is critical during student years, shaping one's future psychological health and professional efficacy.

Given the rapid societal changes and challenges, acknowledging and addressing the need to strengthen students' psychological health is a priority within the educational system, paving the way for realizing the full potential of modern psychology in nurturing psychologically healthy and self-actualizing personalities (Fig. 1).

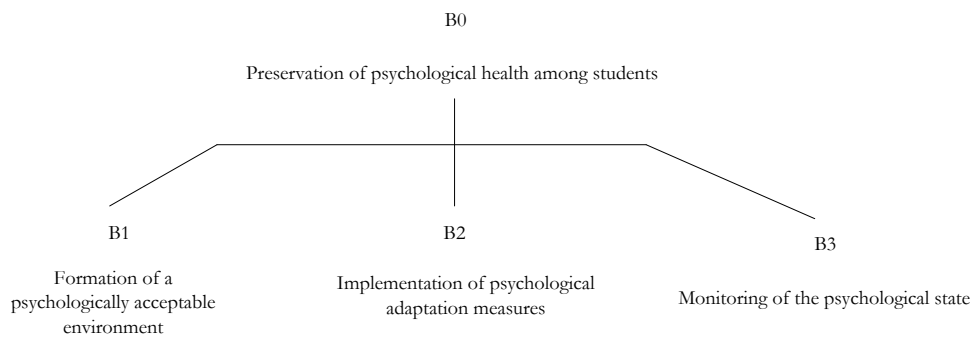
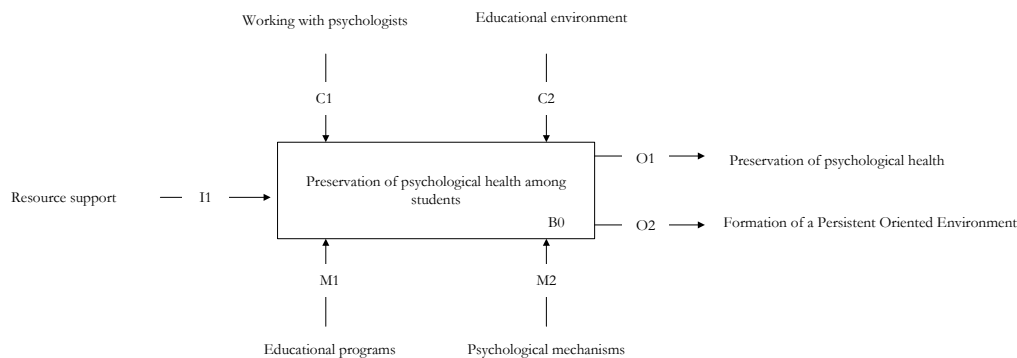


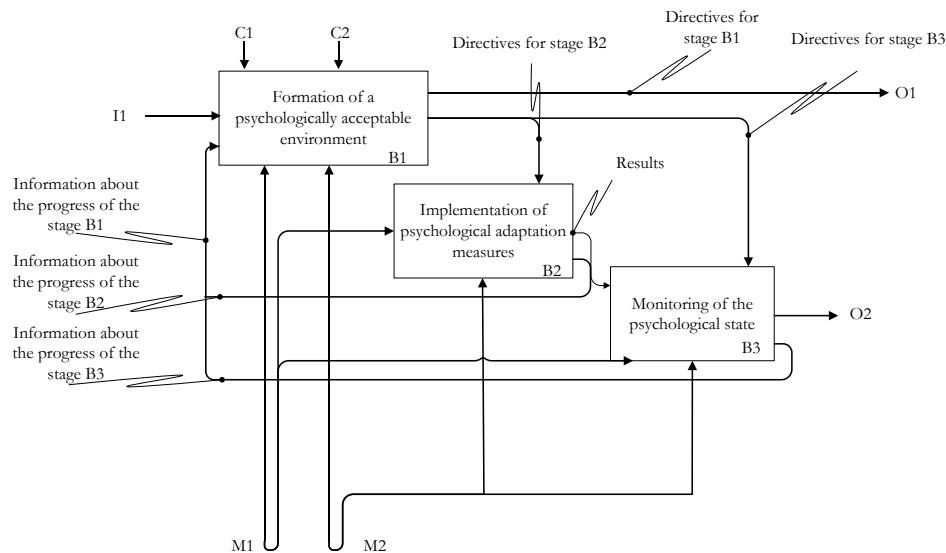
Figure 1. The Main Stages of Modeling

The main elements of modeling of ensuring the preservation of psychological health among students are presented in Fig. 2.



**Figure 2. The Main Elements of Modeling of Ensuring the Preservation of Psychological Health Among Students**

The main model of ensuring the preservation of psychological health among students is presented in Fig. 3.

**Figure 3. The Main Model of Ensuring the Preservation of Psychological Health Among Students**

Psychological health is essential for an individual's complete functionality within society, linking the physical and mental aspects of health. A psychologically healthy person is creative, energetic, and open to new experiences, understanding both themselves and the world through intellect, feelings, and intuition. Such individuals fully accept themselves while appreciating the uniqueness of others, taking responsibility for their lives and learning from challenges. Their lives, though not always easy, are purposeful and continuously evolving, contributing positively to others' development (Kalkman, 2018).

To maintain and enhance psychological health, universities might implement psychological training sessions and offer counseling. The design of such corrective development programs should aim to create a supportive environment that strengthens students' psychological health. Effective programs could focus on fostering acceptance of others, enhancing reflective skills, and nurturing a drive for self-development. These elements should be integrated into a holistic approach that considers students' age-related and individual differences, ensuring that the intervention aligns with their specific needs and life stages.

Psychological health underpins a person's self-reliance, shaping behavior and relationships guided by both external norms and internal, conscious principles. In this educational context, both students and teachers play critical roles. Teachers, in particular, need to maintain a positive demeanor, use expressive communication techniques, and create a supportive emotional environment to assist students in their psychological well-being. As Socrates famously stated, treating the body and soul together is essential for holistic health (Sheridan, Zinchenko, Gardner, 2004).

University students often face significant challenges as they transition into higher education environments, requiring adaptation to new academic demands and social settings (Kryshtanovych, Zyazyun, Vykhrushch, Huzii, Kalinska, 2022). The stress of these changes can lead to frustration and psychological strain, which for some may evolve into more serious issues such as anxiety, uncertainty about their career choices, and neurotic tendencies. Modern psychology offers a wealth of knowledge on promoting healthy psychological

development and adapting to new life stages. Educational institutions can leverage this knowledge to develop psychoprophylactic programs tailored to enhance student adaptation and mitigate potential psychological issues. These programs might include teaching self-regulation techniques and introducing varied and engaging teaching methods to maintain student interest and prevent fatigue and boredom (Greely, et al. 2018).

By addressing these psychological needs through structured support and adaptive educational strategies, universities can foster a healthier, more resilient student body equipped to handle the challenges of higher education and beyond.

## Conclusions

Psychological adaptation is crucial for the well-being and success of students, particularly in pedagogical universities where the need to support and enhance population health is a core objective. This adaptation involves the ongoing interaction between the individual and their environment, crucial for cultivating the motivation to maintain good health. For students, particularly noticeable stress points include the transition into university, examination periods, and the culmination of their studies—all times when psychological burdens are significantly amplified.

First-year students are particularly vulnerable, facing a sharp need for psychological support as they navigate new academic and social environments. This period often involves managing time effectively, addressing financial issues, and coping with personal challenges such as homesickness and loneliness, as the familiar network of friendships from their previous life stages is disrupted. Research indicates that about half of first-year students struggle with these adaptation challenges (Latynin, Pastukh, Tarasenko, Shevchenko, Munko, 2021).

The impact of these adaptation struggles is profound, influencing not just academic performance but also longer-term social integration. Without effective adaptation, students may either drop out or graduate without the necessary resilience to thrive in wider society. Yet, the student years are also a pivotal period for developing strong psychological adaptation capabilities, as the fundamental structures of personality are sufficiently matured and amenable to growth.

Effective psychological adaptation is characterized by a dynamic balance between an individual's psycho-emotional state and the shifting demands of their social environment. For first-year students, this balance is influenced by their psychophysical condition, psycho-emotional stability, cognitive functions, and value-motivational orientation (Sylkin, Bosak, Homolska, Okhrimenko, Andrushkiv, 2021).

## References

- Ahlgrim, N., Garza, K., Hoffman, C., and Rommelfanger, K. S. (2019). Prodromes and preclinical detection of brain diseases: surveying the ethical landscape of predicting brain health. *eNeuro* 6. <https://doi.org/10.1523/ENEURO.0439-18.2019>
- Diggle, E., Welsch, W., Sullivan, R. et al. (2017) The role of public health information in assistance to populations living in opposition and contested areas of Syria, 2012–2014. *Confl Health*, 11(33), <https://doi.org/10.1186/s13031-017-0134-9>
- Farah, M. J. (2012). Neuroethics: the ethical, legal, and societal impact of neuroscience. *Annu. Rev. Psychol.* 63, 571–591. <https://doi.org/10.1146/annurev.psych.093008.100438>
- Greely, H. T., Grady, C., Ramos, K. M., Chiong, W., Eberwine, J., Farahany, N. A., et al. (2018). Neuroethics guiding principles for the NIH BRAIN Initiative. *J. Neurosci.* 38:10586. <https://doi.org/10.1523/JNEUROSCI.2077-18.2018>
- Heymann D. L. (2017) Public Health Surveillance for Communicable Diseases: From Rigid and Static to Flexible and Innovative. *American journal of public health*, 107(6), 845–846. <https://doi.org/10.2105/AJPH.2017.303795>
- Kalkman, J.P. (2018) Practices and consequences of using humanitarian technologies in volatile aid settings. *Int J Humanitarian Action* 3(1). <https://doi.org/10.1186/s41018-018-0029-4>
- Kryshtanovych, M., Kryshtanovych, S., Chubinska, N., Khromova, Y., & Sylkin, O. (2022) The System of Public Administration in Educational Institutions in Rural Regions in the Context of the Development of Educational Culture. *Revista Brasileira De Educação Do Campo*, 7, e14140. <https://doi.org/10.20873/uft.rbec.e14140>

- Kryshtanovych, M., Romanova, A., Koval, I., Lesko, N., & Lukashevskaya, U. (2021) Research of problems and prospects of state development in the pedagogical process. *Revista Tempos E Espaços Em Educação*, 14(33), e16534, <https://doi.org/10.20952/revtee.v14i33.16534>
- Kryshtanovych, M., Zyazyun, L., Vykhrushch, N., Huzii, I., & Kalinska, O. (2022) Philosophical Aspects of Determining the Main Components of the Formation of Professional Competence for Students. *WISDOM*, 22(2), 130-137. <https://doi.org/10.24234/wisdom.v22i2.606>
- Tsymbal-Slatvinska, S., Maksymchuk, B., Saienko, V., Babii, I., Behas, L., Lemeshchuk, M., Chepka, O., Dychok, T., & Maksymchuk, I. (2022). Psycho-Pedagogical Experience of Intellectual Education in the Views of Ukrainian and Foreign Pedagogues as the Basis of Modern Neuropedagogy. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 13(4), 321-346. <https://doi.org/10.18662/brain/13.4/391>
- Latynin, M., Pastukh, K., Tarasenko, D., Shevchenko, S., Munko, A. (2021) Public administration in the economic sphere of Ukraine: strategic approach. *Studies of applied economics*, (39), 2021, No 5. URL: <http://ojs.ua.es/ojs/index.php/eea/article/view/4967>
- Pham, P. N., & Vinck, P. (2012) Technology, conflict early warning systems, public health, and human rights. *Health and human rights*, 14(2), 106–117
- Sheridan, K. & Zinchenko, E. & Gardner, H. (2004). *Neuroethics in Education. Neuroethics in the 21st Century: Defining the Issues in Theory, Practice and Policy*, J. Illes (Ed.) Oxford University Press, Forthcoming <https://doi.org/10.1093/acprof:oso/9780198567219.003.0018>.
- Shook, J.R, Giordano, J.A (2014) Principled and cosmopolitan neuroethics: considerations for international relevance, *Philosophy Humanit Med*, 9(1) <https://doi.org/10.1186/1747-5341-9-1>
- Sylkin, O., Bosak, I., Homolska, V., Okhrimenko, I., & Andrushkiv, R. (2021) Intensification of Management of Economic Security of the Enterprise in the Post-Pandemic Space. *Postmodern Openings*, 12(1Sup1), 302-312. <https://doi.org/10.18662/po/12.1Sup1/286>
- Sylkin, O., Buhel, Y., Dombrovska, N., Martusenka, I., & Karaim, M. (2021) The Impact of the Crisis on the Socio-Economic System in a Post-Pandemic Society. *Postmodern Openings*, 12(1), 368-379. <https://doi.org/10.18662/po/12.1/266>
- Trimper, J.B., Wolpe, P.R., Rommelfanger, K.S. (2014) When “I” becomes “We”: ethical implications of emerging brain-to-brain interfacing technologies, *Front. Neuroeng*, 7(4). <https://doi.org/10.3389/fneng.2014.00004>.