

## Innovative Trends in Educational Management in a Globalized World: Organizational Neuroscience

Nataliia SAS <sup>1</sup>

Irina MOSIAKOVA <sup>2</sup>,

Olena ZHAROVSKA <sup>3</sup>

Oleh BILYK <sup>4</sup>

Tetiana DROZD <sup>5</sup>

Lidiia SHLIKHTENKO <sup>6</sup>

<sup>1</sup> Doctor of Science in Pedagogy, Associate Professor, International Visiting Researcher, Diretoria de Pós-graduação Proeppi IFPR Instituto Federal do Paraná, ORCID ID: <https://orcid.org/0000-0003-0308-6092>, [sasnat2008@gmail.com](mailto:sasnat2008@gmail.com)

<sup>2</sup> Director, Candidate of Pedagogical Sciences, Communal organization "Center for Creativity of Children and Youth "Shevchenkivets", ORCID ID: <https://orcid.org/0000-0002-8932-3759>, [mosyakova@ukr.net](mailto:mosyakova@ukr.net)

<sup>3</sup> Doctor of Philosophy, Candidate of Pedagogical Sciences, Public Higher Educational Establishment «Vinnytsia Academy of Continuing Education», ORCID ID: <https://orcid.org/0000-0002-4154-1458>, [mova\\_m@ukr.net](mailto:mova_m@ukr.net)

<sup>4</sup> Candidate of Technical Sciences, Associate Professor, Vice-rector for Scientific and Pedagogical Work and Monitoring the Quality of Education, Public Higher Educational Establishment «Vinnytsia Academy of Continuing Education», ORCID ID: <https://orcid.org/0000-0001-5088-1115>, [bilyk.oleg2012@gmail.com](mailto:bilyk.oleg2012@gmail.com)

<sup>5</sup> Candidate of Pedagogic Sciences, Dean of the Faculty of Public Administration, Social and Natural Sciences, Public Higher Educational Establishment "Vinnytsia Academy of Continuing Education", ORCID ID: <https://orcid.org/0000-0001-9054-771X>, [drozdtm0173@gmail.com](mailto:drozdtm0173@gmail.com)

<sup>6</sup> Postgraduate, Public Higher Educational Establishment, Vinnytsia Academy of Continuing Education [shlihtenkolidia@gmail.com](mailto:shlihtenkolidia@gmail.com)

**Abstract:** *The article discusses the problems and prospects of personally centric and, partly, technological reforms in the management of Ukrainian educational institutions in the context of innovation and leading global trends.*

*The main idea of the article is to deploy the concept that institutionalized education is self-regulated by local actors and relies on the human proactive motivated resource of teachers and students with minimal implementation from above.*

*The purpose of the article was to investigate three aspects of education management: innovative global trends, problems of current education management in Ukraine and recommendations and methodological advice for such management.*

*The authors used mainly theoretical methods of literature selection by keywords, system analysis of this literature, methods of summarizing - generalizing - classifying principles, methods and forms of education management, as well as the method of design and educational modeling to provide specific recommendations and advice.*

*The result of the article was a synthesis of the latest global trends in educational management, which we summarized in 12 key points; argumentation of challenges and obstacles to innovative management of educational institutions in Ukraine, identification of destructive factors in the way of this management and provision of outline recommendations for reform.*

**Keywords:** *Horizontal interaction, deinstitutionalization, anthropocentric concept, resources, methodological lacunas, problems and recommendations.*

**How to cite:** Sas, N., Mosiakova, I., Zharovska, O., Bilyk, O., Drozd, T., Shlikhtenko, L. (2023). Innovative Trends in Educational Management in a Globalized World: Organizational Neuroscience. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 14(3), 450-468. <https://doi.org/10.18662/brain/14.3/484>

## Introduction

The challenge of innovative management of educational institutions is critical in the 21st century because of rapid technological development, globalization, and changing human resource needs. Educational institutions must now adapt and apply innovative management practices to train student teachers for an uncertain future where skills such as critical thinking, creativity, collaboration, and adaptation are highly valued. By effectively managing and implementing innovative approaches, educational institutions can ensure that future phasers receive a relevant and effective education, equipping them with the necessary tools to thrive in a more complex and interconnected world.

**Relevance of the research topic.** Despite the ongoing war with Russia, Ukraine and Ukrainian institutional education are facing new challenges. Not only the need to abandon pro-Soviet hierarchical methods of management of educational institutions, but also the need to create innovative educational conditions for the development, self-assertion and self-actualization of the individual throughout life, regulated in the "National Doctrine of Education Development of Ukraine in the XXI century" (2002), and concretized in the task of intensified, advanced innovative development of education and science.

Ukrainians in a year and a half of full-scale Russian-Ukrainian war of 2022 - 2023 and now are gaining invaluable experience of proactive, rapid and horizontal management of human and technological resources. This correlates with the global experience of developing quality management of communities and organizations in the world. Thus, scholars argue that the so-called (Total quality management in education (TQM) is a natural result of the evolution of management from the 1920s to the 1980s, which took place in the Western world in the context of three wars: World War I, World War II, and the Cold War. States have adopted this unique wartime experience to manage education based on leadership, personal human resources, and continuous quality monitoring, Mukhopadhyay (2020). Such management is based on the relatively low role of vertical management and the assignment of authority to self-regulation, horizontal links and personal responsibility at each link. In post-Soviet states, vertical administrative management is still valid, although it does not correspond to modern social, psychological and managerial trends.

At the same time, the mobilization of solutions to the problem of education management became more acute a few years ago due to the

COVID-19 epidemic, especially in marginalized regions and developing countries (Gupta & Goplani, 2020).

It is clear that effective governance is associated with the formation of a person's innovation culture (new thinking combining creativity, entrepreneurship, willingness to take risks, social and professional mobility, destruction of conservative attitudes (Russel, 1974); organization of continuous human learning throughout life, promotion of the development of new approaches to encourage participants in innovation processes, creation of a pan-European system of benchmarking the quality of firms and individuals, etc.) (Watson, Tharp, 1993); Sas, 2013).

However, cultural, moral, physical and spiritual resources of self-management in the educational process in Ukraine are well developed only in the near-educational sphere - mainly in sports and coaching activities, where these aspects are well expressed (Berbets et al., 2021; Nenko et al., 2022). Now it is relevant to extrapolate such experience to the management of educational institutions in general.

In carrying out the research we will rely on several types of information and methodological resources. First of all, it is the "National Doctrine of Education Development of Ukraine in the XXI century", which formulates the main educational goal - to create conditions for the development, self-assertion and self-actualization of the individual throughout life; it concretizes it in the task - approval of the strategy of accelerated, advanced, innovative development of science education. One of the conditions for achieving the goal is training and improving the competence of managers at all levels for effective management and achievement of didactic goals of the educational process, National Doctrine of Education Development of Ukraine (2002).

We also proceeded from the framework provisions of European and domestic documents in the field of higher education, motivating the expediency of training to realize the innovative component of professional activity, in particular, future managers of educational institutions to implement innovative structurant of managerial activity - innovative management (Jongbloed, 2004).

*The working attitude* of our article is the thesis that within the framework of theoretical analysis and educational modeling it is possible to identify regional, specifically state problems and prospects of innovative management of educational institutions. Such innovative processes determine new requirements to the subjects of innovations: formation of new models of social behavior, construction of personal system of values and identification structures (Petrides & Nodine, 2003).

However, *the philosophical and educational basis* of our article is still determined by the person-centered concept of institutional management (mainly "bottom-up"), which necessarily accompanies the technological aspect itself. We proceed from what researchers have noted: the ability to easily change identification structures is no longer a pathology, but a factor of normality. Constant social changeability together with necessity forms a subject who easily changes roles and identities corresponding to them. In the assessment of a manager of the postmodern era, building his "open identity project", only the element of personal creativity varies: whether he creates this project, so to speak, "in the image and likeness" of the contradictory existence, or whether these features of everyday life force him to search for and/or produce new content that becomes the basis of the identity of a leader and manager (Petrides & Nodine, 2003).

In this case, we take as *a postulate* the unity of the effectiveness of management of an educational institution and its innovativeness. Even the mechanism of creating a new identity (collective and individual) is innovativeness. Its interpretation through the interpretation of traditional and renewed, permanent and changing, social and personal components of social progress, professional adaptation and activity in a competitive environment attracts new aspects in general philosophical and psychological and pedagogical dimensions (Sallis & Jones, 2013). Educational institutions, methods, technologies should become a factor in successfully solving the problem of identity formation of a teacher, who is the main subject and emotional and motivational source of management. In this regard, we predict that in the near future in Ukraine will change the idea of professional training of educational functionary and leader as a continuous process of forming the ability to think, behavioral, emotional new formations.

*The global relevance* of the problems and prospects of management of educational institutions is increased due to the latest conditions: rapid changes in the environment, increased riskiness, uncertainty, which put forward new requirements to the management of educational institutions, in particular - to the training of current and future managers.

### **Innovative trends in educational management in a globalized world**

Let us first outline the general intents of innovative management of organizations. Scandinavian specialists Nordstrom & Riddestrale (2008) interpret innovativeness of management as an image of opinions concerning every member of the organization, everything and everywhere. It turns an organization into a factory of ideas and dreams, competing on the basis of imagination, inspiration, uniqueness and initiative. Such innovativeness

applies to every aspect of the organization: administration, marketing, finance, design, human resource management, and service delivery. In an effort to ensure innovativeness, it is necessary to review all aspects of the enterprise, organization, institution, namely: strategy, speed of implementation of accumulated experience and more rational organization of work. "Total" innovativeness requires attention to customers (Nordstrom & Riddestrale, 2008). In our opinion, such considerations can be fully extrapolated to educational institutions.

These ideas should be supplemented with neoliberalist reinterpretations of Eastern traditions. Thus, Japanese researcher Kono, author of the book "Strategy and Structure of Japanese Enterprises" (2016), identified and described four management styles: innovative-analytical; innovative-intuitive; conservative-analytical; conservative-intuitive Kono, 2016). According to T. Kono, it is the innovative-analytical management style that is the most effective, as it is able to ensure organizational survival in the conditions of fierce market competition. This style contains a number of parts of managerial behavior: commitment to the organization (company); vigor and innovation; receptivity to new information and ideas; generation of a large number of ideas and initiatives; rapid decision-making; high integration of collective actions; clear formulation of goals and attitudes; readiness to consider the opinion of others.

Before analyzing the educational innovation management, itself, let us note in advance: the newest methods of education management are in most cases deinstitutionalized and rely not on ways of building effective hierarchies, but on resource (human and technological) implementations on the ground. Yes, the first and super important trend is the integration of technology in educational management, Yordanova (2007). This includes the use of learning management systems, virtual classrooms, online performance assessment tools, data analytics, and artificial intelligence (AI) to personalize the learning experience and optimize administrative processes.

In terms of learning management in terms of subject participation, we should talk about *blended learning*, which combines traditional classroom learning with online learning components, to some extent inclusion as a mix of heterogeneous human resource (Tayebnik & Puteh, 2013). This allows for flexibility and personalization of the process by utilizing both face-to-face interaction, diverse experiences, and online interaction. This approach promotes student engagement and offers a variety of learning methods.

The core of personal management resource is competency-based education. It focuses on students' mastery of specific skills and areas of knowledge and teachers' mastery of core communication, management,

leadership and innovation competencies (Glaesser, 2019). This allows all educational actors to develop at their own pace, which is congruent with the dynamics of the institution as a whole. This approach promotes personalized learning, offers targeted support and gives students the opportunity to demonstrate their knowledge and initiatives.

Based on the above-mentioned key competencies of learning-management, projects have become an effective method of didactically conducting the educational process. Project-based learning involves students in well-defined practical activities that require critical thinking, collaboration and problem-solving skills. It promotes active learning, student involvement and application of knowledge in real-life situations.

The superior (compared to current didactics) method of managing educational institutions is data-driven decision making. Scholars argue: educational management increasingly relies on data analysis to inform decision-making processes (Lv et al., 2022). By collecting and analyzing data on student success, attendance, and other relevant metrics, educators can identify areas for improvement, track progress, and make informed decisions to enhance learning outcomes.

An integrating factor in horizontal person-centered management are professional learning communities (PLCs) (Admiraal et al., 2021). They foster collaboration among educators by allowing them to share best practices, collaborate on instructional strategies, and collectively solve problems. These communities support ongoing professional development and help improve teaching practices in educational institutions.

Still, at the heart of innovative management (apart from the technological component) is an anthropomorphic (human) factor that can organize social emotional learning (SEL) around a facilitative informal leader. It focuses on the development of learners/students' social and emotional skills such as self-awareness, self-control, social awareness, relationship skills and responsible decision-making. Integration of SEL in educational management promotes student well-being, positive classroom culture and academic success. M. Mukhopadhyay, in his book *"Total quality management in education"* cites numerous examples of inspired and enthusiastic educators who, for their own pleasure, taught a subject in such a way that students rallied around the teacher and even eagerly welcomed him or her at the school doorstep to empathize with the process of learning together, (Mukhopadhyay, 2020)

In our opinion, the main problem of formation of professional managerial deontology, professionalization of the teacher and sociologization of the student lies in the plane of organizational culture and

psychology. Given the natural reaction to changes in the educational environment, it is crucial to manage work-related stress within the organization (Hafidhah & Marton, 2019). A team approach using significance diagnostics, hypothesis tests, correlation, and multiple regression along with their interpretations showed that low levels of work stress within a team can contribute to organizational culture and individual perceptions of organizational support. This factor also reduces the likelihood of suffering perceived failures, allowing work stress to remain at a manageable level without escalating into hyperic forms.

Given the growing need to address managerial, deontological, and subcultural issues through the application of advanced neuroscience research, scholars have introduced a new praxeological discipline, organizational neuroscience (Becker et al., 2011). The development of the field is ongoing and characterized by an unchanging dialogue. It revolves around three main challenges: expanding the relevant theoretical framework in neuroscience, exploring new avenues of inquiry, and engaging in discussions of current and metatheoretical issues. The central idea of organizational neuroscience is to prioritize the understanding of natural rather than acquired social dynamics in order to foster effective collective interaction in the management of humanities-oriented institutions.

Most such studies have focused on neurophysiological measures of stress in collective educational and cultural settings, with particular emphasis on educational and industrial organizations with high levels of shared risk (such as allied health, fire department, and psychological rehabilitation groups). For example, Chancellor & Yoshimura (2004) suggest measuring adaptability of the ability to withstand, respond quickly, and apply the necessary competencies. This also includes assessing resilience to stressors, stressor avoidance, and even avoidance and escape capabilities.

Consequently, all of the above methods and modules of anthropocentric management of educational institutions aim at the formation of open and flexible learning spaces (environments). In this way, institutional educational management considers the resources, design and use of flexible learning spaces that can be easily adapted to support different teaching and learning methods. These spaces foster collaboration, creativity and learning centered on the teacher, learner and student as the main actors of management from "below".

### Ukrainian problems and ways to solve them

In this section we will present three stages of analyzing the problems of education management in Ukraine. The first stage is to analyze the frequency of publication of the most relevant to the topic of our study scientific papers in Ukraine, which indicates the current state of the problem. We have noticed a strange trend: the peak of relevance of management education problems in Ukraine was observed in 2013 and after that significantly decreased to 1-2 publications per year. Below we explicate in the form of a curve of increasing and peak relevance of managerial discourse in education (Fig. 1).

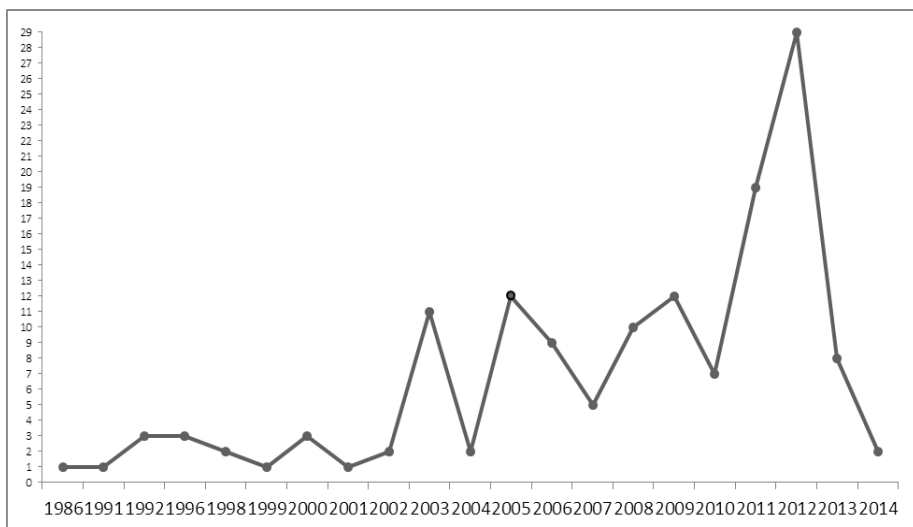


Figure 1. Diagram of fluctuations in the output of relevant publications

Thus, we can make an intermediate conclusion: after studying all types of publications (monographs, articles, abstracts of scientific works, conference materials) we have determined their total number - 148 titles, and the time period of increasing - extremum and sharp decline in relevance covers 1986 - 2014.

The frequency distribution of publications by years can be presented as follows: 1986 - 1; 1991 - 1; 1992 - 3; 1996 - 3; 1998 - 2; 1999 - 1; 2000. - 3; 2001 - 1; 2002 - 2; 2003 - 11; 2004 - 2; 2005 - 12; 2006 - 9; 2007 - 5; 2008 - 10; 2009. - 12; 2010 r. - 7; 2011 r. - 19; 2012 r. - 29; 2013 r. - 8; 2014 r. - 2.

After that we can trace technological and methodological dissonance: in Western Europe and the USA the first peak of development of innovative



educational management took place at the turn of the 1990s - 2000s (Leidner & Jarvenpaa, 1995; Tolofari, 2005), and in the last 2 - 3 years there is a "second wave" associated with total informatization, technologization and horizontalization of educational relations. In Ukraine, however, the discourse of such a "second wave" is critically lacking. Therefore, we consider it appropriate to describe such scientific and practical dissonance.

Thematic comparison of Ukrainian scientific publications of this active period with the world trends analyzed in the previous section allows us to identify methodologically epistemological achievements and lacunas of Ukrainian discourse of innovative educational management (Table 1). It should be noted that due to the significant volume of the authors of the discourse (almost a hundred) we will allow ourselves, in order to save printing space, not to cite their specific works and achievements.

Table 1. Achievements and lacunas of Ukrainian education management discourse

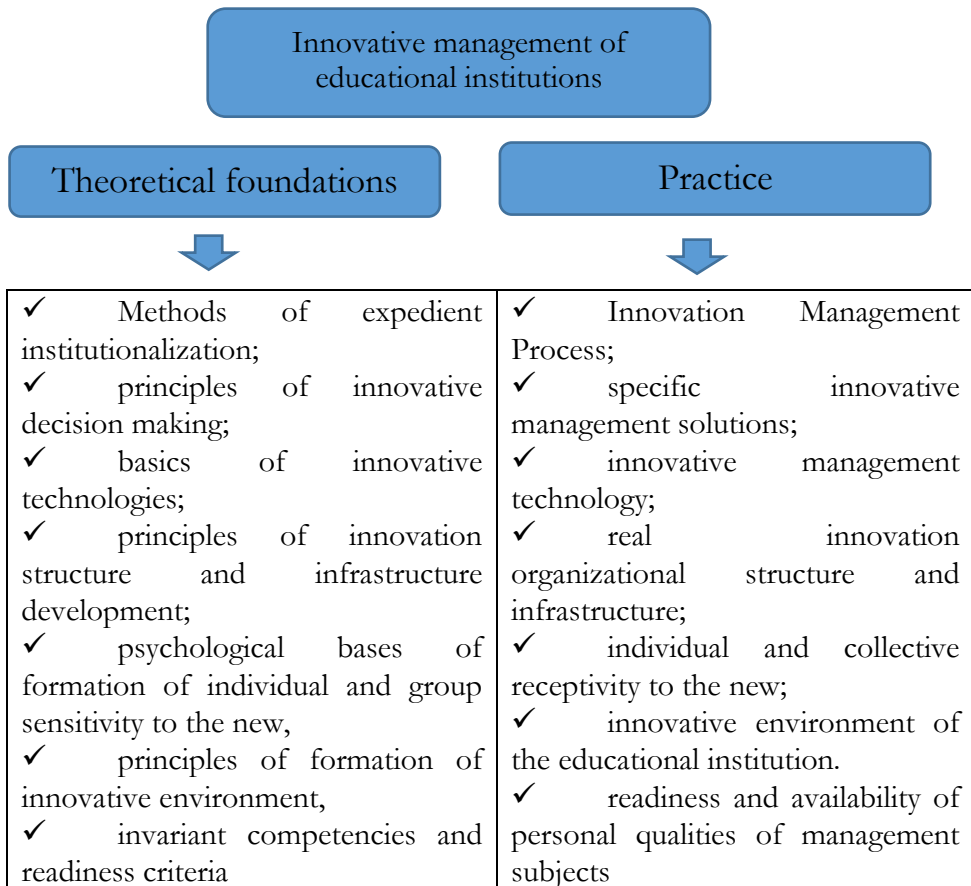
Directions for the research conducted	Ukrainian scientists who investigated	Unexplored/lowly explored aspects
Methodological foundations of innovation in the management of educational institutions.	V. Astakhova, A. Yevtodyuk, V. Yegorkin, A. Knyazeva, S. Kurdyumov, V. Kremen.	Application of innovation approach to make changes in organizations and institutions in order to achieve competitive advantage (M. Weber, E. Durkheim, J. McCulloch, T. Parsons, D. Riccardo, A. Smith, G. Spencer, G. Tarde, J. Schumpeter).
Theoretical issues of innovation management.	A. Batrutdinov, B. Hrynev, N. Zavorotinskaya, B. Zaremsky, V. Zakharchenko, R. Kanter, H. Kosharna, S. Nikolayenko, O. Stepanova.	Integration of technologies in education management
Application of innovations in the management of institutions of the economic sphere.	Sh. Akhmetov, P. Vahanov, G. Demchenko, A. Zabrodin, V. Ivanov, A. Krechetov, V. Latrushev, M. Mironova, A. Rusinov, L. Tarasenko, Kh. S. Hlukhova, V. Hrytsenko, L. Danilenko, A. Marmaza, N. Pogrebnyaya, N. Svobodnova.	Integrative (blended learning, online learning+inclusion) (C. Dziuban, C. J. Bonk, A. G. Picciano, N. D. Vaughan, R. G. Buendía).

management of educational institutions.		
Implementation of innovative technologies in the management of educational institutions.	H. Aniskina, I. Aronov, M. Biryukova, V. Boychuk, M. Hryneva, P. Krasnov, Y. Kulikova, L. Makarova, K. Mitrofanov, S. Repin, N. Sas, Y. Teslya.	Organizing flexible learning spaces for self-management (P. Barrett, St. Heppell, R. Dillon, A. Strickland-McGee, C. Greiffenhagen).
Features of innovation strategies and innovation policy of educational institutions.	H. Biryukova, V. Hrabovsky, M. Devyatkina, I. Kodolova, S. Pekhareva.	Social and emotional learning (SEL) with human resource self-management (D. Goleman, M. Brackett, M. J. Elias, R. Weissberg, K. A. Schonert-Reichl).
Implementation of innovative organizational structures and infrastructure of educational institutions. Innovative decision-making.	L. Belyi, Z. Herasymchuk, A. Zankovskyi, K. Kashuba, K. Losev, A. Raevneva, N. Rud.	Professional learning communities (PLCs) based on horizontal communication (R. DuFour, R. DuFour, R. DuFour, R. Eaker, M. Shirley, A. S. Bryk).
Individual and collective receptivity to the new, innovative environment of educational institution.	O. Belovodska, O. Hryshchenko, M. Kubra, V. Ponomarev, V. Trofimov, L. Trofimova. L. Vasylenko. H. Vasylenko, Y. Vlasenko, I. Havrysh, L. Kizimenko, S. Kuzheva, Z. Kurlyand, K. Losev, N. Romanenko	Data-driven management decision making (L. Darling-Hammond, J. Hetty, M. Fullan, D. B. Reeves, W. H. Schmidt).

The table is concluded by the authors after systematic study of the available scientific discourse

As we can see, some aspects of management of educational institutions are sufficiently researched in Ukraine, but the most anthropocentric (human resource) problems are lacunas in the Ukrainian discourse.

Let us continue our discourse by modeling general recommendations for Ukrainian education. As a result of terminological and conceptual analysis of concepts and terms used in the corpus of studies of the above authors on the invariant setting "innovative management of the educational process" we can present the structure of such management in Fig. 2.



The structure is an elaboration of the authors of the article

The above theoretical foundations and practices can be implemented in Ukraine while leveling the shortcomings and problems outside the educational environment.

Based on the analysis of the real state of management of the Ukrainian educational landscape and after studying foreign and own pedagogical experience of the authors it is possible to give below meta-problems on the way of innovative management of educational institutions in Ukraine and to design modules of their solution.

*Problem: lack of funding and resources.* Insufficient financial resources and inadequate funding mechanisms pose a significant challenge to innovation management in Ukrainian educational institutions. Limited budgets restrict investments in current technologies, professional development programs for teachers, and infrastructure improvement. Lack of resources creates an innovation gap, preventing schools from applying advanced management tools and strategies, hindering the introduction of innovative teaching methods and limiting access to advanced learning resources.

*Recommendation.* To address this problem, the Ukrainian government should prioritize the allocation of adequate funding to educational institutions specifically designed for innovation initiatives. Public-private partnerships and collaboration with the business sector can also help to secure additional resources and funding to support innovative management practices.

*Problem: Resilience to change and innovation.* Resistance to change is a common obstacle to innovation in educational institutions around the world, and Ukraine is no exception. Teachers, administrators and other stakeholders are often reluctant to adopt innovative management practices due to various factors: fear of the unknown, comfort with traditional management methods and lack of incentives to adopt innovative approaches.

Efforts to overcome resistance to change should focus on fostering a culture of innovation in educational institutions. This can be achieved through professional development programs that provide training and support for educators in adapting to new methodologies. Recognizing and rewarding innovative initiatives, creating common platforms for knowledge sharing, and fostering an enabling and empowering environment are also critical to overcoming resistance to change.

*Problem: weak collaboration and communication networks.* Innovation thrives in an environment that encourages collaboration and communication between educational institutions, policy makers and other stakeholders. However, in Ukraine, the lack of a strong collaborative structure limits the exchange of ideas, best practices and resources needed for innovation management. The lack of effective collaboration leads to a

fragmented education system that hinders the spread of innovative management approaches.

To facilitate collaboration in management, educational institutions should create networks and platforms that facilitate the sharing of experiences, successes and challenges related to innovation management. Government agencies, non-governmental organizations and educational associations can play a key role in creating spaces for collaboration, organizing conferences and facilitating partnerships between institutions. These initiatives will encourage knowledge sharing, promote innovation and create a collective commitment to transformational educational management.

Problem: *inadequate regulatory framework*. Another obstacle to innovative management of educational institutions is the legal and regulatory framework in Ukraine. Bureaucratic processes, rigid rules and outdated policies hinder the adoption of innovative practices. Educational institutions face the challenges of adapting to new technologies, experimenting with new teaching methods, and implementing flexible management approaches through regulatory constraints.

Addressing this challenge requires a comprehensive review and reform of existing education policies and regulations. Normative frameworks need to be updated to facilitate and encourage experimentation, flexibility and innovation in education management. Evidence-based policy formulation and stakeholder involvement in policy development. This process will ensure that regulations are aligned with the variable needs of educational institutions and support innovative management practices.

Problem: *limited access to information and technology*. Access to relevant information and advanced technology is vital to foster innovation in educational management. However, many Ukrainian educational institutions face challenges in obtaining and utilizing up-to-date information and technology resources. Limited access to reliable Internet connectivity, outdated hardware and software, and insufficient digital literacy training hinder the effective implementation of innovative management practices.

To overcome this obstacle, there is a need to invest in improving digital infrastructure in educational institutions, especially in remote and rural areas. Providing reliable Internet connectivity, equipping schools with modern hardware and software, and offering training programs to improve digital literacy among teachers and administrators will empower educational institutions to use technology for innovative management practices.

Problem: *insufficient opportunities for professional development*. Effective implementation of innovative management practices requires qualified and

competent educational leaders and administrators. However, limited professional development opportunities in Ukraine hinder the acquisition of basic skills and knowledge necessary to implement innovations in educational management. Insufficient training programs and workshops focused on innovative practices and leadership development contribute to the persistence of traditional approaches to management.

A way to address this is for educational institutions to provide comprehensive and ongoing professional development programs for teachers and administrators. These programs should include training in innovative teaching methodologies, technology integration, change management, and leadership skills. Collaboration with universities, educational associations, and international partners will help ensure that diverse and high-quality professional development opportunities are available.

*Problem: socio-cultural factors.* Socio-cultural factors, including societal attitudes towards education, can influence the adoption and implementation of innovative management practices. Traditional beliefs and resistance to change in society can be an obstacle to the adoption of innovative approaches in educational institutions. In addition, cultural norms that favor rote learning and exam-oriented education may hinder the adoption of learner-centered and innovative pedagogical practices.

Resolving these socio-cultural factors requires a multifaceted approach. Promoting awareness and understanding of the benefits of innovative management practices among parents, students and the wider community is important. Involving community stakeholders, involving parents in decision-making processes, and emphasizing the positive impact of innovative approaches on student outcomes can help change societal attitudes toward education and encourage support for innovative management practices.

The main achievement of the article is that we confirmed the initial presumption - the possibility to identify regional, specifically state (for Ukraine) problems and prospects of innovative management of educational institutions and model ways of their solution, as well as presented the structure of such management (Fig. 2).

Theoretical systematic study of the latest trends allows us to summarize innovations in the management of educational institutions in a list of twelve key points:

1. Innovative management of organizations emphasizes imagination, inspiration, originality and initiative, turning organizations into idea factories.

2. Management innovation applies to all aspects of an organization, including administration, marketing, finance, design, human resources, and service delivery.

3. The integration of technology such as learning management systems, virtual classrooms, and data analytics plays a critical role in today's educational management.

4. Blended learning combines traditional classroom instruction with online components, offering flexibility and personalized learning experiences.

5. Competency-based education focuses on specific skills and branches of knowledge, promoting personalized learning and individual development.

6. Project-based learning engages students in hands-on activities, fostering critical thinking, collaboration, and problem-solving skills.

7. Data analysis informs decision-making processes in educational administration by identifying areas of improvement and tracking progress.

8. Professional learning communities foster collaboration among educators, share best practices, and improve teaching practices.

9. Social-emotional learning (SEL) and stimulating informal leaders promote positive classroom culture, student well-being, and instructional success.

10. Work-related stress management and organizational culture are critical to effective educational management.

11. Organizational neuroscience explores the natural social dynamics of enhancing collective interaction in humanities institutions.

12. Flexible learning spaces that support collaboration, creativity, and student-centered approaches are important in educational management.

Innovation in educational management involves the application of new strategies, technologies and methodologies to improve teaching and learning processes, organizational effectiveness and student outcomes. While innovation has been recognized as a catalyst for educational transformation around the world, Ukrainian educational institutions face significant challenges and barriers to their ability to adopt and implement innovative management practices.

Innovative management of educational institutions in Ukraine faces numerous challenges and obstacles. Inadequate funding, resistance to change, limited collaboration, regulatory constraints, limited access to information and technology, insufficient professional development opportunities, and socio-cultural factors contribute to the difficulties encountered in implementing innovative practices. However, by addressing

these challenges through targeted solutions such as increased funding, culture of innovation, in-depth collaboration, regulatory reforms, improved access to technology and comprehensive professional development, Ukrainian educational institutions can overcome these obstacles and apply innovative management practices. Such interventions will contribute to the improvement and transformation of the educational system, ultimately benefiting students and preparing them for the rapidly changing demands of the world.

As a result of the analysis, we identified such disruptive factors in the way of innovative management of educational institutions in Ukraine *as lack of funding and resources, resistance to change and innovation, weak cooperation and communication networks, inadequate regulatory framework, limited access to information and technology, insufficient professional development opportunities, socio-cultural factors*. In the previous chapter, we proposed general technological, organizational, didactic and legal ways to address these issues, as well as the need to improve the quality of education management in Ukraine.

We also concluded that the Ukrainian science of educational management has stopped at the first wave and has every opportunity to both assimilate the best European experience and use the accelerated universal management process in the wartime context.

We realized that in the Ukrainian scientific, medical and organizational discourse are well developed theoretical issues of innovation management, the problems of general principles of innovation in the management of educational institutions, the application of innovation in the management of institutions of the economic sphere, the implementation of basic innovative technologies in the management of educational institutions, innovation strategies, the introduction of innovative organizational structures and infrastructure of educational institutions and the principles of innovative decision-making in the context of individual and collectively

However, the authors of the article identified areas of urgent research and implementation of the application of the innovation approach for change in organizations and institutions to achieve competitive advantage, integration of technologies in educational management, principles of integrative (blended) learning, organization of flexible learning spaces for self-management, methods of social and emotional learning (SEL) with self-management with the help of human resource. We have provided specific framework recommendations for the organization of the educational process based on horizontal communication.



## Acknowledgment

The authors thank the administration of the National Library of Ukraine named V. I. Vernadskyi, which provided the most complete bibliographic and electronic resource for this study. We also note that the authors made a complementary and full contribution to the writing of this article.

## Conclusions

Questionnaire's results of the respondents may be influenced by subjectivity, and to avoid that, we asked them to make a realistic analysis of an individual level and choose the right answer for each item.

In our study, we managed to assess the level of PA among university employees, and the results of our analysis showed that over 78% of the participants met the requirements of moderate and high-level PA. The analysis by gender revealed that females were more active than males. Owing to their specific professional activity, they spent 7 hours daily on average sitting, which could enhance sedentary behavior in time. Our results and data analysis suggest that the perception of PAs in the daily life of the university employees is high, but professional activity and leisure time prevail in their schedule because they spend less than an hour daily for PA. To achieve a sustainable life quality and well-being, it is important that this category of employees be able to practice various kinds of sport activities in their leisure time in order to compensate for their professional activity. The lack of PA during daily activities means a sedentary lifestyle and possible health issues in the future.

---

## References

---

- Admiraal, W., Schenke, W., De Jong, L., Emmelot, Y. & Sligte, H. (2021). Schools as professional learning communities: what can schools do to support professional development of their teachers? *Professional development in education*, 47(4), 684-698. <https://doi.org/10.1080/19415257.2019.1665573>
- Becker, W. J., Cropanzano, R. & Sanfey, A. G. (2011). Organizational neuroscience: taking organizational theory inside the neural black box. *Journal of Management*, 37(4), 933-961. <https://doi.org/10.1177/0149206311398955>
- Berbets, T., Berbets, V., Babii, I., Chyryva, O., Malykhin, A., Sushentseva, L., Medynskii, S., Riaboshapka, O., Matviichuk, T., Solovyov, V., Maksymchuk, I. & Maksymchuk, B. (2021). Developing independent creativity in pupils: Neuroscientific discourse and Ukraine's

- experience. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 12(4), 314-328. <https://doi.org/10.18662/brain/12.4/252>
- Chancellor, M. B. & Yoshimura, N. (2004). Neurophysiology of stress urinary incontinence. *Rev Urol*, 6(3), 19-28.  
[https://www.hdgo.hr/userFiles/upload/documents/ginekologija/uroginekologija/mehanizmi/2a\\_Neurophysiology-SUI.pdf](https://www.hdgo.hr/userFiles/upload/documents/ginekologija/uroginekologija/mehanizmi/2a_Neurophysiology-SUI.pdf)
- Glaesser, J. (2019). Competence in educational theory and practice: a critical discussion. *Oxford review of education*, 45(1), 70-85.  
<https://doi.org/10.1080/03054985.2018.1493987>
- Gupta, A. & Goplani, M. (2020). Impact of COVID-19 on educational institution in India. *Purakala Journal U (CARE Listed)*, 31(21).  
<https://ssrn.com/abstract=3679284>
- Hafidhah R, Martono S. (2019). The effect of perceived organizational support, job stress and organizational culture on job performance. *MAJ*, 8(2), 177-8.:  
<https://journal.unnes.ac.id/sju/index.php/maj/article/view/25979>
- Jongbloed, B. (2004). Regulation and competition in higher education. *Markets in Higer Education: Rbetic or Reality?*, 87-111. DOI: 10.1007/1-4020-2835-0\_5
- Kono, T. (2016). *Strategy and structure of Japanese enterprises*. Routledge.
- Leidner, D. E. & Jarvenpaa, S. L. (1995). The use of information technology to enhance management school education: A theoretical view. *MIS quarterly*, 265-291. <https://doi.org/10.2307/249596>
- lv, Q., Zhang, Y., Li, Y. & Yu, Y. (2022). Research on the construction of a nursing education management model based on a small data-driven model and its application. *Computational Intelligence and Neuroscience*, 2022.  
<https://doi.org/10.1155/2022/3099794>
- Mukhopadhyay, M. (2020). *Total quality management in education*. SAGE Publications Pvt. Limited.
- National Doctrine of Education Development of Ukraine (2002). Approved by the Decree of the President of Ukraine from 17.04.2002 № 347/2002. *Official Bulletin of Ukraine*. 16. 11–24. <http://www.president.gov.ua/documents/151.html>.
- Nenko, Y., Medynskiy, S., Maksymchuk, B., Lymarenko, L., Rudenko, L., Kharchenko, S., Kolomiets, A., & Maksymchuk, I. (2022). Communication training of future sports coaches in the context of neurophysiological patterns. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 13(1), 42-60. <https://doi.org/10.18662/brain/13.1/268>
- Nordstrom, K.. & Riddestrale, J. (2008). Funky business forever: Capitalism for pleasure. *Mann, Ivanov i Ferber*, 328.
- Petrides, L. A. & Nodine, T. R. (2003). Knowledge management in education:

- defining the landscape. <http://iskme.path.net/kmeducation.pdf>.
- Russel J. D. (1974). *Modular Instruction*. Minneapolis. Minn. Burgess Publishing Co.
- Sallis, E. & Jones, G. (2013). *Knowledge management in education: Enhancing learning & education*. Routledge.
- Sas N. N. (2013). Vision component of training future leaders of educational institutions in innovative management. *Science and Educationa. New Dimension. Pedagogy and Psychology*. 130–137. <https://seanewdim.com/wp-content/uploads/2021/02/Sas-N.N.-Vision-component-of-training-future-leaders-of-educational-institutions-in-innovative-management.pdf>
- Tayebinik, M. & Puteh, M. (2013). Blended learning or E-learning?. *arXiv preprint arXiv:1306.4085*. <https://doi.org/10.48550/arXiv.1306.4085>
- Tolofari, S. (2005). New public management and education. *Policy futures in education*, 3(1), 75-89. <https://journals.sagepub.com/doi/pdf/10.2304/pfie.2005.3.1.11>
- Watson, D. L., Tharp, R. G. (1993). *Self-modification for personal adjustment*. Pacific Grove: CA/Cole.
- Yordanova, K. (2007, June). Mobile learning and integration of advanced technologies in education. *Proceedings of the 2007 international conference on Computer systems and technologies*. 1-6). <https://doi.org/10.1145/1330598.1330695>