

Zhytomyr Ivan Franko State University Journal. Pedagogical Sciences. Vol. 4 (99)

Вісник Житомирського державного університету імені Івана Франка. Педагогічні науки. Вип. 4 (99)

ISSN (Print): 2663-6387 ISSN (Online): 2664-0155

METHODOLOGY AND HISTORY OF PEDAGOGY METOДОЛОГІЯ ТА ІСТОРІЯ ПЕДАГОГІКИ

UDC 37:1]:001.895 DOI 10.35433/pedagogy.4(99).2019.5-12

INNOVATIONS AS AN ATTRIBUTE OF MODERNITY: PHILOSOPHICAL AND PEDAGOGICAL DISCOURSE

D. O. Kozlov*

The paper aims at exploring the philosophical and pedagogical foundations of modernity, as well as to figure out the innovations as an attribute of modernity. Modernity in philosophy refers to the fundamental modification of pre-modern political philosophy of the concept of innovations.

Modernity, however, in philosophy and pedagogy refers to the move from feudal social order to the capitalistic one under the grand project of industrialization, secularization and rationalization. Modernity, from its commencement, possesses two innate characteristics: one is epistemological or conjectural which is the actual philosophy, and another one is ontological or applied.

The article reveals the contents of the main theoretical approaches to understanding the essence of innovation from the point of view of philosophical and pedagogical discourse. Differences in the understanding of innovation in the context of different philosophical, economical and pedagogical discourses are identified. The purpose of this article is to provide a historical philosophical and pedagogical perspective on theories of innovation, and a sense of their broad range. Tracing the history of the discourses of scholars, practitioners and policy-makers, and exploring how and why innovation became defined by J. Schumpeter. Five types of innovations are distinguished by the author. Also, it is stressed that the concept of "innovation" as a new scientific and organizational combination of scientific factors is motivated by entrepreneurial aspirations.

Therefore, it is stated that societal and political transformations perpetually cause tension in educational systems, this is the locus of a seemingly endless struggle. The debate repeatedly merges philosophical, epistemological and pedagogical issues. In this article a theoretical framework of the innovations concept, relational trust and risk-taking is evoked to examine implementation of this aspect in the learning environments. The research reported in this article provides an analysis of pedagogical, instructional and learning innovative discourses drawn from the point of view of philosophical and pedagogical literature.

ORCID: 0000-0003-1875-0726

_

^{*} Candidate of Pedagogical Sciences (PhD in Pedagogy), Associate Professor (Sumy State Pedagogical University named after A. S. Makarenko) fpdo@sspu.edu.ua

Keywords: innovations, innovative culture, modernity, philosophical discourse, pedagogical discourse, learning environment, attribute.

ІННОВАЦІЇ ЯК АТРИБУТ СУЧАСНОСТІ: ФІЛОСОФСЬКО-ПЕДАГОГІЧНИЙ ДИСКУРС

Д. О. Козлов

Інноваційне середовище відіграє надзвичайно велику роль для країни, а застосування його є невід'ємною частиною для створення ефективної економічної стратегії держави. Подальший розвиток інноваційної діяльності в Україні можливий за умови розуміння значення наукової та високотехнологічної діяльності, які створюють нове знання та інновації. Удосконалення інноваційної діяльності можливе лише за умови адекватного умовам розвитку понятійно-категоріального апарату зазначеної сфери (відображає сутність явища) шляхом його закріплення у базових нормативно-правових актах (розкривають основні змістовні характеристики явища) та однорідного застосування на практиці.

Дана стаття має на меті дослідити філософські та педагогічні основи сучасності, а також визначити нововведення як атрибут сучасності. Сучасність у філософії стосується фундаментальної модифікації домодерної політичної філософії концепту інновацій.

У статті розкрито зміст основних теоретичних підходів до розуміння сутності інновацій з точки зору філософсько-педагогічного дискурсу. Виявлено відмінності в розумінні інновацій у контексті різних філософських, економічних та педагогічних дискурсів. Забезпечено історичний філософсько-педагогічний погляд на сутність концепту інновації. Простеження історії дискурсів науковців, практиків та політиків, а також дано визначення поняття "інновація" Дж. Шумпетером, що трактується як нове наукове та організаційне поєднання наукових факторів мотивоване підприємницькими прагненнями. Виділено п'ять видів нововведень.

Зазначено, що суспільні та політичні перетворення постійно викликають напругу в освітніх системах. Дебати неодноразово поєднують філософські, гносеологічні та педагогічні питання. У цій статті теоретичні аспекти концепції інновацій виокремлено з метою їх упровадження до освітнього процесу закладу освіти.

Проведено дослідження історіографії щодо термінів "інновація" та "інноваційний процес". Особливу увагу приділено розгляду "відкритих інновацій". Це дозволило відстежити як змінювалось поняття "інновації" з часом, класифікувати існуючі типи інновацій за різними ознаками та відокремити їх відповідно до кожної категорії.

Ключові слова: інновації, інноваційна культура, сучасність, філософський дискурс, педагогічний дискурс, освітнє середовище, атрибут.

Introduction of the issue. The planetary, systematic and holistic scale of analysis of the contemporary socio-cultural landscape shows that the beginning of the 21-st century is an era of innovation, the emergence, repetition and dissemination of which is a key condition for the sustainable development of humanity. Innovation is the leading way in all areas of human life and activity: from technology and

economics to politics, ecology and education.

The anthropological and axiological dimension of innovation is undoubtedly a priority, because it does not challenge the thesis that innovation in economics, management, politics, art or education begins, above all, with a change in values. The beginning and future success of innovative projects belongs to the field of acquisition by the

subjects of their creation of new meanings, motivation, readiness to perceive innovations as a necessity and a key factor of realization of the essential forces of the personality. While not claiming to solve the eternal philosophical question of the primacy of being or consciousness, it should be emphasized that the main determinant of the emergence of innovation is the proper level of innovative thinking and innovative culture formation. considerations, in turn, make necessary to speak about strategies and methods of development of innovative culture, the prominence of which is provided, first of all, by education. So, there is need for a comprehensive research analysis of innovations as an attribute of modernity: philosophical and pedagogical discourse.

Current state of the issue. A deep analysis of theories of innovations as an attribute of modernity, systematization and a detailed criticism of certain approaches are contained in the works J. Alexander. H. Haferkamp. N. Smelzer, A. Martinelli, E. Tiryakian, K. Kumar, P. Sztompka, W. Zapf, V. Inozemtsev, P. Kutuev, N. Tikhonova, V. Fedotova and many (Alexander, 1994; Haferkamp, Smelzer. 1992; Martinelli, 2005; Kumar, 1995; Tiryakian, 1991; Zapf, 1998; Sztompka, 1996; Inozemtsev, 2000; Kutuev, 2009; Fedotova, 1997 Tikhonova et al. 2007). These papers develop such an approach propose a systematization of contemporary theories of innovations as an attribute of modernity from the point of view of philosophical and pedagogical discourse.

Aim of research of this article is to find out the essence of innovations as an attribute of modernity: philosophical and pedagogical discourse.

Results and discussion. Today, leading global politicians, scientists, representatives of international business and the public, who, in particular, have rallied around the non-

governmental transnational organization Rome Club, speak of education's decisive role in building an innovation society. In 2018, its leaders released an anniversary report on the state and trends, threats and prospects of the modern world called "Come on! Capitalism, Short-termism, Population and Destruction of the Planet". In the mentioned document, A. Wijkman and E. Weizsacker stated that the modern world is moving towards because unlimited destruction, anthropocentrism, desire the to maximize income and satisfy the hedonistic needs of people, leads to destabilization and degradation planetary and irreversibly. Thinking about the way out of the situation caused by the short-sightedness of humanity, scientists point to the New Enlightenment an innovative education that will teach a holistic perception of the world, responsible, solidarity and integral humanism. Education becomes the basis for the sustainable development of civilization. a source of formation and diffusion of innovations [1: 1-3, 237].

the Analyzing concept of "innovation", it is stressed that the world is undergoing deep and systemic, decisive and irreversible, global and dvnamic changes. Mankind is increasingly confronted with the reductionism of dogmatism and antagonisms, thereby accelerating the integration processes of the noosphere and holistic understanding, forming a transcontinental environment innovation communication. Dialectics of innovation is in the unity of tradition and innovation, in the interaction of the individual and the collective. On one hand, the world of innovation is synergy and self-organization environment, and on the other, the priority role in the generation, dissemination and implementation of new ideas belongs to the active subject - the human being.

Although innovation, according to statement of the modern philosopher and pedagogue V. Kremin, is an alter ego of globalization, its sources should be sought on level, individual because any innovations appearance is caused by individual's inner spiritualintellectual energy, the considerable strain of his spiritual, intellectual psycho-emotional entities [6: 153-157].

The works of the Austrian economist J. Schumpeter contributed to scientific thinking and theoretical enrichment of the concept of "innovation" [11; 13]. The scientist, considering innovations from point "new combinations of realization", considered that economic development is a process of "creative destruction" in which new technologies replace old ones. The author distinguished five types of innovations, namely: launching new products, creating a new good or a new quality of an existing product; introduction of new production methods, use of new technological processes; opening up markets where a particular industry has not yet been introduced;

use of new raw materials, new sources opening; new market construction structures, significant changes production organization, major etc. [11: 159]. reorganizations, In J. Schumpeter general, considered "innovation" as a new scientific and organizational combination of scientific factors motivated by entrepreneurial aspirations. We agree with scientist's view that "innovations" are possible changes aimed introducing and using new goods, new production and vehicles. At the same V. Manuylenko time. as A. Myshchenko emphasize that а significant drawback of the Schumpeterian innovation concept was that its limited innovation solely to economic activity [8: 23].

It should be noted that currently there are different methodological approaches to the innovations' classification.

Thus, innovations in education according to the level of innovation change V. Vakulenko proposes to divide into eight ranks (Table 1):

Table 1 The innovations' classification according to V. Vakulenko [2]

Nº	Levels	Characteristics
1.	zero level	tradition reproduction, primary properties regeneration of the educational system
2.	first level	quantitative changes in the system at constant quality
3.	second level	system elements regrouping and organizational and pedagogical changes, new combinations of known pedagogical means, their sequence change, rules of use, etc.
4.	third level	adaptation changes of the educational system in new conditions without going beyond the old model of education
5.	fourth level	the emergence of a new solution to a particular educational problem
6.	fifth level	the emergence of "next generation" educational systems, changing most of the primary system properties
7.	sixth level	new educational system creation with a qualitative change of its functional properties while maintaining the system-forming functional principle
8.	seventh level	a fundamental change in the educational system under which a new basic functional principle emerges

In the middle of the 20-th century, innovations gained significant influence beyond the economic sphere, and they integrated into other spheres of social life. According to the innovation objects, innovations start to be classified into including technological, marketing, management, social, environmental, etc. Finally, a new industry is formed - innovation, the subject of which are patterns, trends, features and technologies of innovation 18]. creation [5: An important place in the subject field of innovation takes the question of the subjects, ways and stages of the innovation process, the introduction of innovation in a broad socio-cultural context.

Thinking about the innovation phenomenon, scientists pay attention to the factors and the process of adoption of innovation by the general public. So, the famous researcher of the innovation theory is E. Rogers in the work "Diffusion of Innovations" (1962) distinguished five categories of people depending on their innovation adoption: innovators - subjects that open to innovation, at their own risk, to receive and disseminate it among others i.e. the critical mass required for the initial launch of the innovation; early followers - an authoritative society part that becomes a source of information about innovations; the early majority is a fairly discreet and moderate part of the disseminates population who legitimizes innovation only after careful analysis; the late majority population segment that, despite continued skepticism and distrust of innovation, nevertheless subsequently accepts and disseminates innovations; lagging behind - members of the society, who are quite attached to tradition, accept innovation the last; by the time laggards embrace innovation, it can already become a tradition [13: 136-137].

The ways analysis of innovations introduction makes it possible to state that the spread of new is an essential innovation sign. In this context, the concept of "novation", "novatorship" "innovation" and should be. distinguished. "Novation" means the emergence of new knowledge, ideas, inventions. Novation is not necessarily integrated into culture and practice; it can exist in the form of projects, schemes, utopias, i.e. at the idealistic level. Instead, "novatorship" means the process of improving, and increasing the effectiveness of the existing thing. Novatorship is an activity that contributes to the evolution of existing objects. Finally, "innovation" is a broad and purposeful process of creating and disseminating something new. In this case, it is not only about inventing a fundamentally new product, but also about integrating an already existing product into another culture environment. Not only innovation satisfies the existing society needs, but it also actively promotes the emergence of new interests and needs [19: 56]. Thus, we consider correct the claim that "innovation" is an idea, a practical activity or an object which novelty is felt by an individual or society [14: 409].

Researchers R. Williams, S. Strover and A. Grant distinguish the following of among the stages innovation diffusion: knowledge (the individual innovation): learns about beliefs (individual analysis of innovation advantages or disadvantages); decision adopt or ignore innovation; verification (confirmation of the correctness of the decision on the innovation application, which is made on the basis of its results evaluation) [15: 465-470].

Scientists call it another way of introducing innovation. So, U. Eco in the article "Innovation and Repetition. Between Aesthetics of Modern and Postmodern" ("Innovation et Repetition: Entre Esthetique Modeme et

Postmodeme") states that seriality and repetition do not oppose innovations Such considerations [12: 57]. especially true for education. For the introduction of example, the STEAM-education experience Ukraine will be a repeat innovation on a global scale, but a real innovation for Ukraine. Therefore, the innovation repetition in the new environment causes the emergence of a "new innovation". That is why the optimal development strategy for the innovation in the educational field contains three stages: the first is to identify global educational innovations; the second is to create the conditions for their repetition in a new context and new environment; the third is to motivate the emergence of our own innovations.

civilizational importance The of particular, innovation, in emphasized in the Ukrainian national "Strategies for the Development of Innovation in the Period up to 2030" (2019) [9]. The document states that the development of the country's innovation potential is realized not only through a dynamic economic breakthrough and technological success, but also serves as a key means of security and sovereignty of the state, its competitiveness in the modern world [9].

It should be noted that the historical genesis of innovation is linked to the process of anthropogenesis, because innovation is human being's generic feature. The analytical national report "Innovative Ukraine 2020" (2015) arises interest, as scientists of the NAS of Ukraine have considered the historical development, the current state and of innovation prospects potential reproduction, and have formed the view that the whole humanity history is the history of the innovative component of the shared labor, its subjects and results. Today this history has come to the stage of intensive deployment of one's innovative essence, which manifests itself in the transition from the reproductive and innovative type of development. The core process of this movement is the transition from an industrial market to an information-network economy and a new anthropological type – Netman [3: 12-13].

The term "innovation" is most often considered in categorical syncretism with the notion of "tradition", because the society development is a mutual influence and the confrontation of tradition and innovation. Tradition is necessary for the proper support of the society existence, and innovation is necessary for its development. At the same time, as K. Kyrylenko emphasizes, the deep innovations content is not reduced to novation, but involves communication with tradition [4: 28]. According to the dialectical cognition theory and other physical and social laws (the law of energy conservation, the law of negation of negation), any new quality arises solely on the basis of the former. According to B. Lysin, innovations are inherently contradiction with traditions, which can be solved only if innovations arise in the depths of traditions, which, in turn, serve as a basis for the creative process as a source of innovation culture [7: 49].

Conclusions and research perspectives. Thus, we assume that the innovation component in today's society is extremely important. The of processes creation, perception, dissemination and introduction innovations are considered today as the key conditions of humanity's existence. The modern world is complex and systematic, dynamic and integrated and holistic. The beginning of the third millennium does not give place to simplicity and one-sidedness, does not allow a person to perceive processes and phenomena of objective reality in a prudent, superficial and

cliché way. Therefore, a person who has the ability to create and is willing to perceive innovations as an attribute of modern world is gaining new relevance and exceptional importance.

The prospects for the further research contain the trends analysis in the innovative culture development of the future manager of the educational the magister training institution in process in the context of metamodernism and globalization.

REFERENCES (TRANSLATED & TRANSLITERATED)

- 1. Vaytszeker, E., Viykman, A. (2019).Come on! Kapitalizm, nedalekohlyadnist', naselennya [Come planet ruynuvannya Capitalism, not far from the planet, and populated ruined]. Dopovid' Ryms'koho klubu. Kyiv: Samit-knyha, 276 [In Ukrainian].
- Vakulenko, V.M. (2010). Vydy innovatsiy v osviti ta yikh klasyfikatsiya innovations [Types in their of classification]. Visnuk Natsional'noui akademiyi Derzhavnoyi prykordonnoyi sluzhby Ukrayiny. Pedahohichni nauky - Bulletin of the National Academy of State Border Guard Service of Ukraine: pedagogical sciences. Retrieved from https://nbuv.gov.ua/UJRN/Vnadps/ _2010_4_4 [In Ukrainian].
- 3. Innovatsiyna Ükrayina 2020: natsional'na dopovid' [Innovative Ukraine 2020: national speech] / za zah. red. V. M. Heytsya ta in. (2015). Kyiv: NAN Ukrayiny, 336 [In Ukrainian].
- 4. Kyrylenko, K.M. (2015). Teoretychni i metodychni osnovy formuvannya innovatsiynoyi kul'tury maybutnikh kul'turolohiv u vyshchomu navchal'nomu zakladi [Theoretical and methodological basics of formation of future culturology's innovative culture in the modern educational institution]. *Doctor's thesis*. Kyiv: Kyyiv. nats. un-t kul'tury i mystetstv, 469 [In Ukrainian].
- 5. Kozlova, O.H., Mylenkova, R.V. (2007). *Innovatsiyna kul'tura: sutnisni*

- kharakterystyky: monohrafiya [Innovative culture: essential characteristics: monograph]. Sumy: SumDPU im. A. S. Makarenka, 140 [In Ukrainian].
- 6. Kremen', V. (2012). Filosofiya lyudynotsentryzmu v osvitn'omu prostori. Filosofiya lyudyny i osvita [Philosophy of personocentrizm in the educational environment. Philosophy of the human-being and education]. Kyiv: "MP Lesya". 524. (Filosofiya osvity: poshuk priorytetiv: u 7 kn. Kn. 2) [In Ukrainian].
- 7. Lysyn, B.K. (2008). Innovatsyonnaya kul'tura [Innovative culture]. *Innovatsyy Innovations*. 10 (120), 49-53 [In Ukrainian].
- 8. Manuylenko, V.V., Myshchenko, A.A. (2012). Sushchnost' innovatsyy, innovatsyonnoho protsessa v retrospektyve y sovremennykh uslovyyakh [The essence of innovationas, innovative process in retrospective in the modern conditions]. *Fynansy i kredyt Finances and Credit.* Vyp. 41 (521), 21-31 [In Russian].
- 9. Pro zatverdzhennya Stratehiyi rozvytku sfery innovatsiynoyi diyal'nosti na period do 2030 roku ["Strategy for the Development of the Innovation Sphere by 2030"]. Retrieved from https://zakon.rada.ua [In Ukrainian].
- 10. Tsvetkova, Y.V. (2016). Élementy innovatsyonnoy kul'tury [The elements of innovative culture]. Karel'skyy nauchnyy zhurnal Karelian scientific journal. 5. 2 (15). 55–59 [In Russian].
- 11. Shumpeter, Y.A. (2008). Teoryya ékonomycheskoho razvytyya [The theory of economical development]. Moscow: Dyrektmedya Pablyshynh, 401 [In Russian].
- 12. Éko, U. (1996). Innovatsyya y povtorenye. Mezhdu éstetykoy moderna y postmoderna. Fylosofyya épokhy postmoderna: sb. perevodov i referatov Philosophy of the postmodern era. Mn.: Yzd. OOO "Krasyko-prynt", 48-74 [In Polish].

- 13. Rogers, E.M. (1995) *Diffusion of Innovations*, fourth edition. New York: The Free Press [In English].
- 14. Rogers, E., Singhal, A. (1996). Diffusion of Innovations. *An Integrated Approach to Communication Theory and Research* / M.B. Salwen, D.W. Stacks (eds.). Mahwah: Erlbaum, 409-420 [In English].
- 15. Williams, R, Strover, S., Grant, A. (1994). Social Aspects of New Media Technologies. *Media Effects: Advances in Theory and Research /* J. Bryant, D. Zillmann (Eds.). Hillsdale: Erlbaum, 463-482 [In English].

Received: October 10, 2019 Accepted: November 05, 2019