

PalArch's Journal of Archaeology of Egypt / Egyptology

THE ESSENCE OF INNOVATIVE DEVELOPMENT OF THE CONTEMPORARY EDUCATION SYSTEM IN MODERN SOCIETY

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Vladimir Ivanovich Kolesov, Natalia Nikolaevna Shevchenko, Nadezhda Anatolievna Bogdanova, Galina Mikhailovna Yanyushkina, Elena Aleksandrovna Raevskaya. The Essence Of Innovative Development Of The Contemporary Education System In Modern Society-- Palarch's Journal Of Archaeology Of Egypt/Egyptology 17(4), 111-119. ISSN 1567-214x

Key Words: Innovative Behavior, Development, Education System, Personality Development, Holistic Approach, Educational Process, Development Of Personality Intelligence.

ABSTRACT.

The article presents the key ideas of the methodological system for measuring the innovative development of education from the point of view of a holistic approach to the human development in modern Russia. Only through education, self-education a person reaches the very top of the "Acme", that is, the perfection of himself.

INTRODUCTION

At the beginning of the third Millennium, the main task facing society in general and the education system in connection with the innovative development of the economy is the formation of innovative human behavior focused on the production of innovations and meeting the needs of the market. In the light of this aspect, the problem of identifying the socio-pedagogical foundations of innovative human behavior becomes urgent.

In fact, we are talking about the innovative development of images of consciousness and human lifestyles within the educational space. But to do this

at first, education itself must obey the logic of innovative development of the life process and be based on the methodology, technology and practice of displaying the innovative essence of all components of the educational space.

The main provisions of the model for measuring the innovative development of educational systems are that the education system is considered as a continuously developing multi-level sequence of educational spaces that provides a holistic innovative process of social formation of the individual in different quality living spaces of society, where the primary space is basic education, qualitatively different from the space of education of an adult.

Education is only a means of organizing and developing of the life process of a man as a person in a certain way of life in a certain life space of society. The single space of human life, society and nature is considered as the most capacious living space. Personality in the conventional sense is a set of relationships. In the most general sense, a person includes the totality of all manifestations of a person as a spiritual and moral, material, and historical-genetic entity [1].

Personality is being developed in the conditions of a certain organization of life and is determined by this organization as a set of participants who are in certain relationships. The main participants in the modern organization of life are man, society, and nature. In accordance with the law of repetition of phylogeny in ontogenesis, in order to determine the logic and stages of human-personality development, it is necessary to know the logic and stages of human-personality development in phylogeny. Historically, a man as a person was firstly being developed in relations with nature and people: man – nature, man-the inner world of man, man-society, and then-through the same cultural spiritual and material values created by him in the process of the same interactions.

It is easy to understand that the education system is an intermediary between the space of life of the inner world of man, his needs, abilities, thinking, intelligence and other human qualities, and the single space of human life as a biological entity, society and nature. Therefore, the education system focused on the formation of innovative human behavior should reflect the innovative nature of the processes occurring in the inner world of man, in man as a biological entity, society and nature. Since a system of consistently developing educational spaces has been in our understanding, each space must have a structure that is adequate to the structure of innovative human behavior and thereby activates its internal creative human capital.

Within the framework of this model, we will try to identify the basis for building and measuring an innovative system of adult education, oriented to the formation of innovative behavior of a person – a student in the conditions of this system.

Innovation is considered as a new formation in dictionaries, which is a new phenomenon. In this regard, it can be argued that when the innovative human behavior in society is being discussed, it should be about building a new model of his way of life, where there is a subject, object, and the process of life that

connects them. Such a holistic approach is a necessary condition for the study, firstly, of the maximum number of possibilities for innovative human behavior. For it is known that in the process of scientific research, the main feature of interaction with the object domain is the well-known methodological position that it is necessary to "take a holistic view of the nature of the phenomenon... and isolate its root, defining features and trends of development [9]. If we are talking about innovative behavior, innovative development of the education system, the full novelty of it will differ only when all its components will be developed in the innovation mode, and the achievement of the novelty of the individual components will show the way to the achievement in the full sense of the word qualitatively new individually and socially significant product – a qualitatively new person, with the ability to own an innovative development, relationship with your own inner world (inner self), with society and nature.

The key point of this development methodology is that the development of any both organic and inorganic system (and organism) is determined by the needs and the corresponding target setting. The main need and the purpose of creating of the innovative development model of the education system is innovative human behavior. According to the law of Ukhtomskiy dominant there is a dominant feature of the development in any system. As we are talking about the innovative development, there must be a genetic dominant in innovation-developing system, which at the entity level creates a qualitatively new result – innovative behavior of the student is the student generating and training (or simulation training system).

Innovations are, firstly, speech and closely related cognitive functions that are genetically programmed only as the ability to assimilate language and culture. This ability is effectively implemented at certain stages of life, when the morphological maturation of the brain takes place, which cannot be a normal process if during this period they do not teach the language and all that is the content of modern education. Consequently, a person is formed in the course of ontogenesis, when not only genetic (phylogenetic) programs are implemented, but also specific features of his or her life and development programs are created.

Secondly, the subjective experience of every human individual is an innovation in the sense that the essential manifestations of his inner life are neither a copy of objective reality, nor a literal repetition of himself based on individual or generic (genetic) memory, nor a copy of other people. Every act of human intellectual activity is based on the sensory representation of reality and the assimilation of language and culture is an invention, creativity, the birth of something that was not previously in nature. It is manifested both in its internal, intellectual, emotional, and volitional expression of the human "I", and in the external actions of the individual" [10, p. 74-75].

At the same time, it is necessary to pay attention to the difference between the concepts of the essence of innovative development, which is the presented system of development laws, and the innovative essence of development as a novelty that characterizes the transition from one qualitative level to another at the level of the entity.

An organized set of life processes is a way of life. Therefore, it will also be possible to talk about an innovative way of life, a constant (stable) qualitative update, a change in lifestyle, like a change in social formations.

In the future, we will understand the innovative development of a system (and then systems) as a transition from one qualitative level of its life (understood as a set of life processes) to another level—a level of higher quality in accordance with the fundamental and moral laws of development and organization of life through the manifestation of the inner essence of a person.

In other words, we are talking about ensuring qualitative transformations of the life process by transferring it from one qualitative level to another, transforming its higher-order essence, which is the human intellect. The adoption of this definition means that in order to talk about innovative human behavior, it is necessary to know what the life process is from the point of view of a person and society, the essence of the life process, what a person is in the process of developing the life process, namely, its human essence, mechanisms and forms of its manifestation and implementation in public life.

As the process of human activity is regulated by a person as a subject of activity, then, it should obviously be regulated by the essence of a person at the level of essence. "Based on the conceptual system of B. G. Ananiev, it is legitimate to treat intelligence as the core of the subject of consciousness" [3], which means that it is the main mechanism that determines behavior in general and in particular – innovative behavior and the generation of innovations, in particular the generation of a qualitatively new educational space.

"Intelligence (lat. Intllektus - mind, reason) – the mind, the ability to think, insight, a set of such functions (comparisons, abstractions, formation of concepts, judgments, conclusions, etc.) that turn perceptions into knowledge or critically review and analyze existing knowledge. Even in the middle ages, a controversial question took place if the will subordinated to the intellect or, conversely, the intellect to the will. The first point of view was represented by Thomas Aquinas, the second such English thinkers as Duns Cattle and William Ockham, dominated by the idea that intelligence, as well as will depend on the relevant circumstances, but he, as belonging to the realm of spirit, above the will relating to mental health" [11].

"As a subject in general, intelligence exists in two systems: at the level of the individual, the intellect presents the makings of mental abilities, on a personal level—the actual skills (thinking first), erudition, creativity, social productivity" [3].

Intelligence is the ability of the human body to (cyclically) transform (and reproduce) resources (primarily energy) of nature into products of human and social activity [8].

Based on this definition, a developing person can compare seven levels of intelligence development with its different seven stages: sensation,

comprehension, awareness, reason, creation, communication, management, which are based on seven types of thinking: object-practical (object-activity), figurative (visual-figurative), logical (abstract-logical), associative, associative-logical, associative-figurative, associative-practical. At the same time, we should especially note that when speaking about sensations, we mean not only five types of sensations, but the widest range of sensory sensations, which were written by B. G. Ananiev. He "expanded the sensory basis of thinking and consciousness in General by including sensations of "secondary" modalities... up to interception." Moreover, B. G. Ananiev believed that "without sensations, no most abstract thought can arise, nor as a mental (generalized and mediated) reflection of being" [4], where they are the source of thinking not only when the sensory act ends, the logical one begins, but also in the very process of discrimination, comparison, analysis, and induction occur, that is, the mechanisms of thinking are formed.

Each subsequent step includes the previous one and, therefore, all the previous ones. Meaningful objective actions, supplemented by logical organization, which turn into an image of consciousness. An associative sequence of images becomes a mind (the development of a nodal measure). In the sequence of images, first logic is fixed, then a single way of life is formed, which is implemented in the practice of life.

In the education system, this entire process must first be presented in the form of image consciousness training, and then materialized in the form of lifestyle, educational space and processes of life.

"The theory of intelligence," as N. A. Loginova writes, "serves as a model of the subject according to B. G. Ananiev [8]. A set of intellectual characteristics determines the quality of man as social creatures, determines the character of his life his conduct in public life, seven qualitatively different levels of development according to seven types of the image of man, which is the result of a developing set of interactions of the inner world of man, society and nature: a genetic human (gene level), an anthropogenic human (the level of the genetic code), a conscious human, a reasonable human, a creative human, a public human, an organic human, which can be considered as human types. In this connection, B. G. Ananiev distinguished an individual, a person, a subject of activity, and an individual in ontogenesis. In this case, each type corresponds to its own qualitatively different way of life, way of life and, accordingly, different from other ways of behavior. If a person builds a life process, moving from one level of life to another, then this process can be considered innovative, and human behavior-innovative behavior, because at each level of development, his behavior is qualitatively different from the previous one.

Therefore, the levels of intelligence development and the levels of human development can be considered as integral vectors and coordinates for measuring innovative human behavior, respectively, at the level of essence, at the level of human typology, and at the level of organization of the educational space and the future real way of life of a person.

However, human behavior in these coordinates is a transition from one level of human development to a qualitatively new level, that is, the phase transition is not performed spontaneously, but has a certain logic of development, determined by the fundamental laws of development and the moral laws of the organization, implemented firstly in the process of developing intelligence, and then through intelligence, in the way of life. Moreover, " each mental process can be considered as an actualization of a particular ability (meaning intellectual abilities) [2].

The entire intellectual potential of a person is aimed at meeting his life needs, which are manifested at the psychological, mental and other levels, the highest level of needs are genetic needs. It is not by chance that B. G. Ananiev wrote "about the significance for intellectual activity of the links of intelligence with the vital activity of the organism – its biochemical, vegetative reality, metabolism, suggesting the concept of "the price of intellectual stress". According to the idea of B. G. Ananiev, the success of mental activity depends not only on the operation of information units, not only on motivation, but also on the energy security of information processing processes in the brain "... functional mechanisms can be understood only in connection with the main characteristics of a person as an individual". They are initially developed according to the genetic program, in the process of ontogenesis. There are mechanisms for programming and diagnosing these needs in the human body. For example, there are programs of genetic inheritance, in the genetic potential, genetic prediction, formed in phylogeny and ontogenesis, special substances are produced in cells that form and diagnose the image of life needs in activity.

All this means that different levels of intelligence can meet different and well-defined types of needs that correspond to qualitatively different life processes of the inner world of a person. The following types of human body processes correspond to the selected types of intellectual qualities: psychological, physiological, biological, biochemical, bioenergetic (synergistic at the level of the genetic code), genetic (at the level of genes), each of which has its own life needs comparable to the levels of intellectual development of a person. At the same time, each level corresponds to its own characteristic features of human behavior caused by its interaction with its own inner world, with its inner Self», which first in the form of foresight must arise in the mind of the teacher in the educational space and the processes of his life [2].

Therefore, the nature, quality, depth, and, accordingly, the degree of innovation of human behavior can and should be determined by the degree of inclusion of these processes in the course of meeting the needs of life. For example, genetic needs (their manifestation and development in accordance with the laws of genetic inheritance and prediction) can be fully met only through the developed intelligence of a brilliant person.

Natural resources are the source and starting point for meeting the fundamental needs of life. Each process of the inner world corresponds to a certain natural process, for example, the weather affects the psychology (whether it satisfies or does not satisfy the needs), the climate affects the psyche (atmospheric pressure), and so on. In accordance with this, there are also seven different

quality processes in nature: weather, climate, physical processes, biological, chemical, energy, and genetic, which form a hierarchical system that correlate with a hierarchically organized set of processes in the human inner world.

Based on this hierarchical organization of qualitatively different processes, it is possible to determine the characteristic features of innovative human behavior caused by its interaction with nature. We get the second one-the natural vector of measuring the innovative dimension of the educational space as an integrity and all its components, which characterizes the innovative behavior determined by the specifics of the resources involved.

The selected three vectors of measurement of innovative human behavior represent three coordinates of measurement of innovative human behavior in the space of education and social life, the quality of which, as shown above, is determined by human intelligence.

At the same time, human intelligence has its own qualities that also determine the nature of human behavior, the quality of intelligence, and then the quality of behavior and, as a result, the quality of life. "The function of mental reflection is maximally embodied in intelligence. The connection of intelligence with personal characteristics determines its dependence on the social being of a person in society. On the other hand, the connection with the individual means that the psychological reflection depends on the natural laws of existence of the human body [5].

For full-fledged innovative behavior, it is necessary to characterize external socially significant manifestations and results of innovative human behavior. The human subject as a social being manifests itself in activities that result in a social product [6]. "Sensory-perceptual, verbal-logical, mnemonic, psychomotor, tonic functions, being in themselves brain functions, are not yet actually mental phenomena, but their possibility [7]. This possibility becomes a reality when the subject interacts with the object.

CONCLUSION.

We believe that the innovation process should be viewed from the perspective of the product of activity, which is located in the same coordinate system as the person. Moreover, it is not only focused on meeting human needs, but also projected needs (even at the biological level, at the level of the cell and genetic code, and, therefore, it should be evaluated in the same coordinate system as the person.

At the same time, moving from one level of social development to another (in accordance with the integral scale of development), the nature of intellectual activity changes, and with it, the ways of activity and the products obtained. Therefore, the results of innovative human development are qualitatively new ways of activity and the corresponding methods of production of material or other social (political, ideological, etc.) relations.

Thus, the above allows us to draw the following conclusions: first, education should be focused on the manifestation of the essence of man, society and nature

in the form of social intelligence through the transition from the essence of one order to the essence of another-a higher order in a single space of human life, society and nature; second, it is necessary to understand that an innovative education system is not only a way of life, it is life itself, which consists of living space changes and lifestyles.

LIST OF REFERENCES

- Ananiev B. G. Contribution of Soviet Psychological Science to the theory of sensations / B. G. Ananiev // Questions of psychology. - 1958. - № 1. - P. 78.
- Ananiev B. G. Materials for the psychological theory of sensations / B. G. Ananiev // Problems of psychology. - L., 1948. - P. 37.
- Ananiev B. G. Man as a subject of knowledge / B. G. Ananiev. - L., 1968. – 339 p.
- Ananiev B. G. Selected psychological works: In 2 - x. - T. T. 1 / B. G. Ananiev. - Moscow: Pedagogy, 1980. - 232 p.
- Barbolin M. P. Socialization of personality / M. P. Barbolin; under the editorship of Professor T. V. Pulyaeva. - St. Petersburg: Petropavlovsk, 2008.- 373 p.
- Kolesov V. I. Introduction to psychology / V. I. Kolesov, A. N. Smolonskaya. – SP.: The Jack-up state fire service of EMERCOM of Russia, 2017. - 512 p.
- Kolesov V. I. General psychology / V. I. Kolesov, G. K. Antonov. – SP.: SPBU GPS EMERCOM of Russia, 2016. – 530 p.
- Loginova N. A. the Experience of human knowledge: The History of an integrated approach in the psychological schools of V. M. Bekhterev and B. G. Ananiev / N. A. Loginova. – SP.: Publishing house of St. Petersburg. UN-TA, 2005. – 285 p.
- Materialistic dialectics as a General theory of development. - Vol. 3-M.: Nauka, 1985. – 423 p.
- Moskalenko A. T. Personality as a subject of philosophical knowledge. Philosophical theory of personality and its psychological and biological bases / A. T. Moskalenko, V. F. Serzhantov. – Novosibirsk: Science, 1984 – 320 p.
- Philosophical encyclopedic dictionary / comp. E. F. Gubsky, G. V. Korableva, V. A. Lutchenko. - Moscow: INFRA-M, 2000. - 576 p.

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