

Holistic Education: the Unity of the Intellectual and Emotional Sphere

Oksana MARCHUK ¹

Iryna HOLIIAD ²

Vladyslav BOIKO ³

Yulia RIBTSUN ⁴

Zhanna BOGDAN ⁵

Kateryna LUKASHENKO ⁶

¹ Private Higher Education Establishment «Academician Stepan Demianchuk

International University of Economics and Humanities», <https://orcid.org/0000-0002-2922-285X>, oxanna442@ukr.net

² PhD in Pedagogical Sciences, Associate Professor, Senior Researcher, State Scientific Institution "Institute of Education Content Modernization", <https://orcid.org/0000-0003-4979-828X>, goliyad-ktnk@ukr.net

³ PhD in Pedagogical Sciences, Associate Professor, Department of Building and Civil Engineering, Civil Engineering and Land Management, National University «Yuri Kondratyuk Poltava Polytechnic», Educational and Research Institute of Architecture, <https://orcid.org/0000-0002-0537-9959>, vladislavanatoli4@gmail.com

⁴ PhD (Education), Senior researcher, Senior Researcher of the Department of Speech Therapy, Mykola Yarmachenko Institute of Special Pedagogy and Psychology of the National Academy of Pedagogical Sciences of Ukraine, <https://orcid.org/0000-0002-2672-3704>, logojuli@i.ua

⁵ Candidate of Psychological Sciences, Associate Professor, Head of the Department of Psychology and Sociology, Simon Kuznets Kharkiv National University of Economics, <https://orcid.org/0000-0003-1560-9516>, Zhanna.Bogdan@hneu.net

⁶ Postgraduate Dragomanov Ukrainian State University, <https://orcid.org/0000-0002-4457-4423>, berezanskaya1994@gmail.com

Abstract: *The article provides a theoretical justification of the emotional-value approach in the educational process, shows its interaction with other conceptual approaches, in particular, defines the intellectual component of personal development. In recent years, pedagogy has developed and tested conceptual provisions characterizing various approaches aimed at effectively solving pedagogical tasks.*

The purpose of the article is to substantiate the ideas that prove the legality and expediency of the emotional-value approach as a truly valuable pedagogical phenomenon, as well as to show its connection with other pedagogical approaches, in particular to investigate the neuropedagogical aspect. The concept of "emotional-value approach" has not been introduced into pedagogical science. But in some studies and publications, the terms "emotional-value component" and "emotional component" are used. The relevance of the article is determined by the intensive development of information and communication technologies in connection with the physiological reactions of the body, which forms the neural factor as an aspect of artificial intelligence. Artificial intelligence is the most relevant phenomenon of human development today. Empirical methods, the method of synthesis, analysis, research, explanatory and scientific methods were used in the research. The results do not exhaust all aspects, but they are important for achieving the goal, namely the determination of the most effective factors for the formation of the unity of the intellectual and emotional sphere in the context of the formation of education and in the conditions of using artificial intelligence as a neuropedagogical factor.

Keywords: *Emotional factor, emotional stimulation, artificial intelligence, neural connections, educational process.*

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Introduction

The emotional factor of the educational process should be understood as emotions that have a significant motivational impact on its effectiveness. The specificity of the concept of "emotional factor" is that it permeates the entire educational process - its goals, content, methods, technologies. Therefore, it is the emotional factor that is the basis of the emotional-value approach in the educational process. In the context of the methodology of pedagogical science, the approach is understood as the focus of the researcher on the use of a set of concepts, ideas, methods of knowledge and transformation of pedagogical reality.

The emotional-value approach is a set of ideas that are the result of theoretical analysis and pedagogical experience, expressed in goals, principles, content of pedagogical activity and adequate technologies aimed at the development and self-development of students (Dvornyk, 2018).

The emotional component is a narrower concept that is part of the emotional-value approach. Extended interpretation of the educational process: the meaning of education is the development of a person, the harmony of his relations with himself, other people, the world; creation of conditions for development - self-development, education - self-education; learning - self-education.

The constitutive goal of the emotional-value approach is to activate the emotional-sensual sphere of students in the educational process as a condition for harmonious influence on the rational-semantic and emotional-volitional spheres of the personality (as opposed to "cognition", paradigm). At the same time, there is a process of actualization of valuable meanings of knowledge, culture, spirituality and morality.

To actualize means to transfer from a potential state to a real, actual state. This "translation" is achieved at the expense of pedagogical stimulation of internal structures adequate to pedagogical goals - emotions, feelings, attitudes, motives; related, but no less important goals: creating an emotionally favorable atmosphere of interpersonal relationships in the educational process; development of students' emotional culture and emotional intelligence, imagination and creative abilities, which is a factor of artificial intelligence.

The pedagogical perspective of studying the functions of emotions can be attributed to the most important theoretical and methodological justifications of the emotional-value approach. The reflective-evaluative function is the most important component of a person's worldview, as it is based on the satisfaction or dissatisfaction of his actual needs: for a person,

"only what can either facilitate or hinder the satisfaction" of needs is significant.

The purpose of the study is the formation of a single intellectual and emotional sphere in the process of holistic education.

Artificial intelligence as one of the manifestations of the neuroscientific approach in the educational process

Artificial intelligence in modern conditions has reached a level of progress that is clearly manifested in the algorithmization and optimization of complex systems management processes, self-organization of processes in automated control systems. Thanks to artificial intelligence and with the help of modern supercomputers, it can independently solve algorithmic, mathematical, extremely complex software tasks and optimize management processes. Thanks to its capabilities, the algorithmization and optimization of processes and phenomena in the 21st century has reached a scale in the management of complex objects, systems with the improvement of artificial intelligence. The development of artificial intelligence, its improvement is increasingly common in neural networks. If you bring the concept of AI closer to a person, you can find the definition of neural networks.

Neural networks are the main direction of studying the possibility of modeling natural intelligence with the help of algorithms. It is worth noting that the neural network is not programmed, but learns.

A neural network, in principle, is a highly parallel device that makes it possible to revolutionize information processing (Ariely, 2002). Artificial Intelligence or in technical language: "AI" is the field of research into the modeling of human intelligence, behavior and the performance of creative functions that are considered to be human properties, with the help of computing devices. One of the definitions of intelligence, a combination for man and machine, can be formulated as follows: intelligence is the ability of a system to create programs in the process of self-learning, primarily heuristic programs for solving problems of a certain complexity class and solving these problems.

The history of AI as a new scientific direction begins in the second half of the 20th century. Many ideas and postulates were created and formulated for its emergence. In philosophy, there have long been disputes about the nature of man, the process of knowing the world (Bäulke, 2000). Artificial neural network, this concept arose when studying the processes that occur in the brain and when trying to simulate these processes. After the development of learning algorithms, the obtained models began to be used for practical purposes: in forecasting tasks, for pattern recognition, and

in control tasks. Currently, artificial intelligence created with the help of neural networks is one of the important factors contributing to the receipt and rapid dissemination of information, its high-quality processing. The use of artificial intelligence in various areas of human activity plays a large role, since all areas of human activity, from primary education to the study of the latest technologies, the study of new types of matter that are still unknown to mankind (Fritzsche et al., 2003).

Artificial intelligence became a key technological trend in 2016, with global investments in it exceeding \$500 million. In 2016, work is underway to create a neural network that will be able to bring the principle of the search engine to a new revolutionary level. The traditional search algorithm is based on matching the content of the query with the content of the analyzed pages. Of course, all this is done with some additions and extensions – queries are reformatted, synonyms are advertised. In the new approach, each request is assigned a specific vector number that most accurately reflects its meaning (Grunschel et al., 2016).

In this case, the request and response may not have a word in common. All that unites them is the same content. According to the company, AI agents use an internal "imagination converter" to better predict how they should act in a given situation. The converter allows neural networks to imagine different scenarios of the development of the situation "in the head" and choose the most favorable one (Ziegler, 2018). The supposed capabilities of artificial intelligence were tested, in particular, on a logical puzzle game in which the player must arrange boxes inside a maze. If a mistake is made and the object is in the wrong position, it can no longer be moved and the game ends. Before each move, the algorithms "in their heads" thought out in which direction it is better to push the box in order to win.

Artificial intelligence is a prerequisite for the development of an information society, which will eventually lead us to a post-industrial society, in which all the necessary conditions will be created for a deeper study of the development processes of a modern intellectual, developed society (Demchenko et al., 2021). Which will ultimately contribute to a deeper understanding of the value of intelligent artificial intelligence of neural networks, which, thanks to specialists capable of managing them, will help lead our society to high achievements and solve global problems facing the modern world. And it is artificial intelligence, neural networks, created and managed by specialists of this high-tech, ultra-complex, ultra-modern technology, that can really solve the vital and significant problems of today.

This is the relevance of modern artificial intelligence of neural networks created on the basis of people.

Features of the intellectual and emotional sphere of personality

The emotional and evaluative side of relations as an ethical category of the individual is always reunited with the intellect. The "relative" aspect of human consciousness cannot be only emotional, it is cultivated by the active work of the intellect and when reflecting emotions - when experiencing, and when expressing an evaluative attitude, and when choosing an act or line of behavior. In the emotional and moral manifestations of the personality, the intellect filters emotions, initiating a sense of moderation, restraint in their manifestations. Antipode - relationships as negative emotional "bursts", emotional chaos; attitude based on "narrowed consciousness syndrome", i.e. angry rejection of other points of view, etc (Prots et al., 2021).

The educational process as the main activity of a schoolchild or student is perceived, experienced, and evaluated by each person from the standpoint of the level of their needs and demands. If the vast majority of students have a positive evaluative attitude to the educational process or to specific subjects, then it is possible to state a positive "emotional field" of the educational process, when other important functions of emotions are involved - motivating, regulatory. Negative reflective and evaluative emotions do not stimulate them; moreover, there is a motive of rejection of both the subject and the teacher.

An exception to the general trend is a developed sense of duty in individual students or an emotionally aware personal significance of an educational discipline for professional activity. Then the key mechanism becomes the will, based on purposeful self-organization and overcoming difficulties (Kosholap et al., 2021).

The motivational function of emotions can be considered motivating, stimulating. Positive emotions are the most important reinforcement of higher social motivations, including moral and labor activity, an emotionally activated brain perceives and processes information and accumulated experience differently.

During the learning process, thanks to positive emotions, thinking is activated, affective traces of attention and memory are formed. The psychological and pedagogical mechanism of the stimulating function of emotions is interest as a need-motivational and emotional phenomenon. There is no need to prove the stimulating functions of interest in anyone's life (Aldinger et al., 2014). As for the educational process, meeting the age-related needs of the individual in situations of interested communication, learning, and activity generates positive emotions associated with both the process and the result of this activity. Interest cannot be emotionless, so

psychologists use such phrases as "emotion of interest", "feeling of interest", "motive of interest". At the same time, the motivating functions of emotions can be associated with such motives as goal achievement, striving for success, self-affirmation of the individual, etc.

The regulatory function of human emotions consists in its adaptation to changed living conditions, communication (style and tone), likes and dislikes (emotional restraint). This is the switching of attention, for example, in an educational situation from a complex fragment based on logical and rational thinking to an emotionally valuable "vision" of this material due to the introduction of emotionally enriched information or game technology. The reinforcing function of emotion is also performed when it comes to emotional support, reinforcement of the semantic unit of cognitive material - educational or carrying the most important semantic load in the upbringing and development of the spiritual and moral culture of the individual (Apostu, 2016).

The creative function of emotions is well-known: creative activity is emotionally saturated, as it is based on the search for novelty, testing strengths in different approaches, options for the optimal solution that meets the needs of adolescence. Since human emotions, reflecting needs, become motives, indicate the degree or possibility of satisfying needs, it logically follows that they are carriers of meaning for a person. In the context of the given conclusion, we can talk about the meaning-making function of emotions.

In the course of the experimental work, the principles of activation of the emotional sphere were revealed, that is, a set of practically-oriented theoretical provisions that underlie the content, forms, methods, and technologies of the educational process, which ensure the unity of the rational and the personally meaningful. One of the important aspects of personality formation is the determination of the principles of unity and harmonization of the rational and emotional. Unity means integrity, that is, emotional and rational reflection, perception. Harmonization is an expedient reunification of rational and emotional in accordance with specific pedagogical tasks. For example, educational material needs logically constructed rational proofs, justifications. The emotional factor performs a related function, which perceives its figurative comparisons, metaphors, connection with life, etc. (Bihun, 2007).

The key role of the emotional is in certain "layers" of the educational process, where feelings, emotions, evaluative attitudes are more important, and the rational understanding of the world is both intellectual and emotional and valuable components of culture in their unity. At the same

time, you the harmonization of the emotional-rational begins, and the result is the rational-emotional, educational values, the assimilation, assimilation of value meanings by a person.

Holistic education as a unity of intellectual and emotional

The art of teaching and upbringing consists in reunification, harmonization, the principle of reunification and merging of "adult" and "child" goals. There are always two groups of goals in the educational process:

- a) pedagogical goal setting - "adult" goals;
- b) motivationally positive activity goals to which a child, teenager or young man aspires, i.e. "children's goals".

The merging of the pedagogical logic of goal-setting and the adolescent's perception of any type of activity is a search for ways to remove the emotional-semantic barrier that arises in situations where, when it comes to the decentralization of the pedagogical concept, its focus on the meaningful and emotional-value perception of students. The ability to see the pedagogical process through the eyes of those for whom it is organized, and, accordingly, to predict and implement educational activities with a hidden pedagogical position is one of the most important starting points of creative pedagogy (Bihun, 2011).

In the process of education, the pedagogical goal can perform the function of an emotional attitude to the significance, valuable value of the educational material, especially if it has a practice-oriented character. However, it is important to reinforce the "known" target motive brought from the outside with external means that ensure rapprochement, reunification, and "absorption" of specific educational tasks as personally significant. This function is performed by the students' orientation to the relationship with life experience and plans for the future, as well as dialogue situations and choice situations organized by the teacher (Bulakh, 2004).

We consider the educational process based on the principle of cooperation-co-creation as a pedagogical activity based on interested communication and the use of attractive means that stimulate creative search, self-activity and activity of schoolchildren and students in the context of their personal self-expression, development, self-construction, self-realization.

Creativity, as is known, is necessary during all age periods of personality development. When defining creativity, any human activity that creates something new is defined, regardless of whether it is the creation of a thing or the construction of a mind or feeling that lives in a person himself.

Both factors – intellectual and emotional – are equally necessary for the act of creativity. Feeling, like thought, drives human creativity (Bukina et al., 2021).

The pedagogical interpretation of the presented judgments consists in the following basic assumptions (Suslova, 2017);

- creativity (co-creation) - always a fusion of the work of thought and feeling; it is a process colored by positive emotions;

- if the potential for creativity "lives" in every person, then the educational process should become a "training ground" for the creative activity of both the teacher and the student.

Cooperation-co-creation creates an emotionally fulfilling environment for the development and self-development of creativity as the most valuable personality quality, which is always in demand in any profession (Demchenko et al., 2021).

The principle of cooperation-co-creation is one of the key components of modern educational technologies. These principles became fundamental in the development of the concept of emotional stimulation. A more accurate name for this pedagogical concept is "emotional value stimulation", since psychological value is a goal that satisfies a need (Raub et al., 2016). Therefore, emotional stimuli introduced into the educational process, in accordance with pedagogical goals, should be, first of all, valuable from the point of view of the student (Sabluk, 2019). On the other hand, the use of emotional stimuli is also valuable from the teacher's point of view, as it allows developing educational programs and technologies that stimulate cognitive interest and creative interaction; these are not direct, but indirect means that remove the layer of didacticism; they provide subjective personal positions of the schoolboy, student in the educational process (Cherezova, 2016).

Since emotional stimulation is based on a combination of external and internal factors, two interrelated approaches to distinguishing the structural components of this concept are legitimate (Jacobi & Manheim, 1959):

- a) internal, subjective-personal, i.e. "vision" of the educational process through the prism of emotional and value perception of students;

- b) external - from the standpoint of creative design of pedagogical activity, stimulation of their subject position.

The method of three-dimensional analysis used live impressions of teenagers, obtained as a result of observing their immediate emotional reactions.

The teacher acts as a tutor, combining the roles of teacher and educator. Helps to understand the reasons for students' unsuccessful actions

regarding compliance or non-compliance with previously agreed rules. The unit of the student's work is an act, that is, an action directed at another person, which involves his response and, taking this into account, correction. The act itself, as noted above, carries the possibility of integrating learning and upbringing into a single educational process, since it has interrelated properties - objectivity and sociality, means the orientation of the subjects of the educational process both to the subject-technological components of the situation, as well as moral relations of people included in this situation.

The reflection of the process and the result of the educational activity is carried out not so much from the position of fixing the result itself, but from the point of view of the analysis of the process of unfolding this activity - both cognitive and moral. The reason and basis for including reflection are equally mistakes, as well as found an effective way to solve the problem. The evaluation of the student's activity in the competence-contextual model of learning is always meaningful, and its actual expression in points is only a reason to turn to the analysis of already performed actions.

Conclusion

Holistic education is an important factor in the formation of a personality, because it is a combination of all value orientations that form a value attitude to certain aspects of life. Only emotional and intellectual perception can be complete in the formation of a person as a personality. It is known that any activity of a schoolchild is carried out through the perception of the properties of the objects with which he deals, through thinking, memory, imagination and other mental processes. These processes are internally controlled, stimulated by certain motives, desires, beliefs, ideals (motivational and executive components of activity). Therefore, the functional development of creative skills cannot be carried out under the influence of coercion. Deep assimilation of complex theoretical material cannot be carried out successfully if interests and needs for knowledge are not developed. The transfer of abilities and skills from one activity to another requires a positive attitude of the student to this other activity. That is, if there is no consistency, correspondence between the motivational and executive components of activity, then in the presence of external signs, the unity of education and upbringing, true unity is not formed.

Thus, the true unity of education and upbringing in any of its forms presupposes such goals, which in their structure correspond to the structure of a complete, comprehensively developed personality, the stimulation of such states of personality activity that correspond to these goals, the unity of the motivating and executive forces in activity and behavior students Under

these conditions, the educational process ensures the formation of a complete, comprehensively developed personality as the main goal of implementing an integrated approach.

The basis for ensuring unity is the content of education and training, methods and forms of their organization. They contain the possibility of actualizing such a state of the team and the individual, mental processes that determine the optimal educational effect under these specific conditions. The attitude of the teacher to the students, the actualization of certain relationships in the team during the acquisition of knowledge, skills and abilities are the conditions that determine the extent to which the possibilities of content, forms and methods will be realized in unity. Thus, with the teacher's undemanding attitude towards students, pedantry, suspicion, tactlessness, with his emotional poverty, schoolchildren experience states of boredom, apathy, desire for entertainment, disrespect for the teacher, isolation in the world of their own thoughts, distant. from the content of education, etc. As a result, the selective, motivational and regulatory functions of the student's personality in relation to mental processes and assimilation of educational material are weakened. There is also a kind of "unity" of the intellectual and emotional, only with a negative educational effect. With this "unity", the richest potential of the educational content cannot be realized by the teacher in the learning process.

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