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MODERN REQUIREMENTS FOR BUILDING AN EFFECTIVE SYSTEM OF HIGHER PROFESSIONAL EDUCATION

The beginning of the XXI century is characterized by the current trend concerning the social demand for a high level of education, culture, professionalism of modern specialists. The system of higher professional education in Ukraine is being developed. It is considered as one of the most important values of statehood and social consciousness. The problems of education and molding the young generation acquire special significance, since the fate of humanity largely depends on the development of the educational sphere of society.

The result of education and upbringing, as it is put in state educational programs and documents, should be professionally trained, competent professionals – active, creative, endowed with a sense of duty and responsibility to society, able to adapt themselves to today's dynamic world, characterized by continuous growth of information, by increasing the role of the personality, the intellectualization of modern specialists' activities.

Currently, various approaches are being developed to build a conceptual framework for such a system of professional education that would best meet the material and spiritual needs of our time thus applying the latest advances in science and aiming at forming a harmonious, creative personality. Therefore, the standards, technologies of pedagogical professional education are being revised and updated all over the world. These trends are typical for Ukraine where the search for means for building an effective national education system and its transferring to continuous professional education is under way.

It has become obvious that rather low general cultural and professional level of some part of the population, especially young people, has a negative impact on the country's competitiveness in the world market and on the level of social stability. Accordingly, certain modern requirements for building an effective system of higher professional education are needed.

I. The first requirement stems from the intensification of information flows on our Planet, being one of the main factors of globalizing world's moving towards future information society/ This process is reflecting the crisis of classical scientific paradigm and developing the modern science in exponential way thus revealing and renewal of knowledge, constant expansion and deepening of scientific research.

At the beginning of the twentieth century, the total amount of knowledge produced by mankind doubled every ten years. According to latest forecasts, the amount of knowledge is to double every few months in the nearest future. That is why the main trend of modern world – the renewal of knowledge and production technologies – presupposes the unfolding of another trend, which determines the focus of modern science and education on the integrity of knowledge rather than on their specific content. This trend is due to the exponential pace of development of our extremely dynamic world when current knowledge and technologies lose their applied value in 10-15 years. This reveals the phenomenon of half-life of modern specialists.

In this context, we can talk about the need to form an integral set of professional competences in prospective specialists, being an important aspect in the process of specialists' training in any field of human activity.

The professional competences are associated not only with a specific amount of knowledge, skills and capacities, but also with specialists' ability to make adequate decisions and apply knowledge in new fields of sciences and technologies (knowledge mobility), where acquired knowledge may be outdated. This trend indicates the need for universalization and modification of knowledge, as well as the need for formation of specialists' ability to use new knowledge in a rapidly changing field of modern information technology. This requires creating such pedagogical system of education that would ensure the introduction of synthetic knowledge in the field of education, which is formed on the basis of interdisciplinary ties.

Thus, there is an urgent need to develop integrated training courses that would combine the achievements of many sciences in a single educational and professional space. In this context, it is important to develop educational systems being aimed at combining in one functional and target context the achievements of many sciences. This is one of the main tasks of the development of the higher education system, which, therefore, should ensure the organization of the educational process on the basis of the principle of interdisciplinarity.

II. By large, such kind of knowledge is to be formed in prospective specialists that would acquire the features of universality, integrity and creative content. For this the knowledge must receive additional figurative, graphic representation, using the phenomena of sensory perception. This process saturates knowledge with new associative ties, enriching it with additional interdisciplinary parallels.

It is known that the process of cognition of the world by human being is closely related to the type of his/her representative system. The psychological direction – neuro-linguistic programming, which is increasingly used by domestic educationalists (O.Тарнопольський, 2015), streams people into several groups, depending on the sensory channel of perception of reality being dominant: audio (hearing), visual (vision) or kinesthetic (movement, equilibrium, touch, taste, etc.) one.

One of the goals of human development is understood here as the harmonious unfolding of three representative systems, which significantly expands the cognitive resources of prospective specialists. Thus, the process of human cognition of the world (which is of an utmost significance in the process of professional training), person's interaction with the social and professional environment largely depends on the level of development of representative/sensory systems, social perception, which, in turn, determines the formation of human empathy, the ability to understand the motives of another person, the ability to stand on his/her point of view. And this very ability characterizes a truly wise person, according to O.K. Tikhomirov.

On the level of human perception and sensory systems such a unity presupposes that there are no emotional reactions that man would not understand (*empathy*), that all his sensory systems (audio, visual and kinesthetic) are equally active and intertwined (*synesthesia*).

Therefore, in the process of professional training it is important to develop in the prospective professionals all representative/sensory systems, which allows building an effective system of higher professional education.

III. Since the sensory and emotional aspects of human psychic activity lie in functional unity (when human emotional states are realized on the sensory level, and sensory reactions are emotionally colored, when emotions and feelings in their unity represent the affective-perceptual sphere of psychic activity of an individual), the question arises as for formation the adequate emotional responses to environmental stimuli in the prospective specialists.

Here we have not only the problem concerning the forming the specialists' regulatory skills (which involves specialists' awareness of their emotional states; emotion management, self-control), but also the problem of maintaining the continuity of emotional reactions in students in the process of their professional training. A person constantly undergoes a dynamic change of emotional reactions, while knowledge, skills and abilities (as well as their complex in the form of

certain competencies) are acquired and formed in the process of certain emotional states, appearing as a certain psychophysiological "field" of competencies, their psychophysiological attachment.

Changing emotional states involves changing the appropriate conditions for the use of competencies. But the prospective specialist may not always be able to use the competences in new emotionally charged life circumstances. It is the long practical activity of the specialist that allows him/her to re-form the relevant professional skills in the new conditions of professional activities step by step. To overcome this fundamental difficulty in the process of professional training, the latter should focus on the contextual (subject-activity) approach, in which the educational activities should simulate students' future professional activity. Under such conditions, it is important to substantiate the psychological basis for the implementation of a competency-based approach to building an effective system of higher professional education.

Let us consider one of the psychological aspects of this process.

As numerous scientific experiments show, the brain's hemispheres can be considered a psychological and physiological centre of human organism, since with their functions a lot of aspects our organism are correlated, specifically, the mechanisms of aim creation and searching the ways of achieving the aims, energy and information regulation of man's behavior, strength and weakness of nervous processes, their lability and inertness, excitation and inhibition, ergotropic and trophotropic functions and processes, etc.

It is known that the right hemisphere of the human brain better perceives the left, and the left hemisphere – the right field of person's vision. In this case, numbers, letters, words, symbols are better perceived when presented in the right field of vision, while specific objects, figurative information – when presented in the left field of vision. It should be noted another sensory peculiarity: the right hemisphere is aimed at the perception of the melodic aspect of musical and verbal information, and the left hemisphere prefers its rhythmic pattern.

Thus, words and all verbal and nonverbal information taken as a whole can be analyzed from the standpoint of its belonging to the "right" or "left" information. Significantly, the hemispheres of the human brain, which are a certain psychosomatic "focus" of human organism, reveal a fairly simple sensory-cognitive scheme of perception of the world, when all "continuous" signals are perceived mainly by the right, and all "discrete" – by the left hemisphere.

Creative activity involves the coordination of functional strategies of the hemispheres, which in the normal state seek to dominate each other. Therefore, the synergistic combination of hemispherical aspects of cognition and mastering of the world involves a combination of visual and abstract-verbal types of perception of reality in one educational context.

As we can see, the information provided to students in educational process must be appropriately located in the right (verbal) and left (figurative) visual field, which corresponds to the hemispheric features of human information processing and contributes to the synergistic effect of convergence of hemispheric functions. This conclusion can serve as a basis for building a strategy for the organization of visual and audio information while using the educational tools.

To illustrate the use of the above principle, let us outline the effective pedagogical system of V.F. Shatalov (В.Шаталов, 1989), who uses the principle of hemispherical synthesis, when two aspects of the human psyche ("right", concrete, and "left", abstract) are brought into harmony within the educational process. Here, on the one hand, the learners receive certain set of specific facts (mathematical, historical, geographical, etc.), and on the other hand, all these facts are translated into the language of reference signals, which are abstract categories. Thus students learn to purposefully and regularly manipulate two opposite sets of phenomena at the same time, carrying out their mutual transformation, when the concrete is perceived and understood through the abstract, and vice versa. The long-term practice of functional unity of the right and left hemispheres contributes to the formation of the skills for "integral" psychic activity, within which learning activities of the students are immeasurably accelerated. Interestingly, V.F. Shatalov's pedagogical system activates not only the purely abstract-logical (left-hemispheric), but also the emotional-imaginative right-hemispheric aspect of mental functions, when learning, similar to

play, becomes an end in itself, being a self-sufficient phenomenon, when, surprisingly, all students begin to create the objects of art.

Thus, we can conclude that creating an effective system of higher professional education involves the orientation of educators at organizing the educational process on the basis of the principle of interdisciplinarity; at harmonizing the sensory systems in the prospective specialists; at developing tools for simulating future professional activity in the process of students' educational activities; at taking into account the psychological characteristics and peculiarities of human perception of information.