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ABOUT HUMANISTIC ORIENTATION OF PROFESSIONAL TRAINING OF FUTURE ENGINEERS

The appearance of The Decree of President of Ukraine "On main directions of reformation of higher education in Ukraine" contributed to the situation that nowadays society recognized the need to prepare humanistic-oriented professional. This will help to establish civilized relations in all spheres of public life in Ukraine, and more fully and consistently satisfy demand in the labor market according to new realities. Thus optimization of the structure of professional training for a market economy occurs in higher education[1]. Considerable attention is paid to mainstreaming issues of social education of students, based on the ideas of democracy, freedom and humanism.

The gradual deepening of social division of labor led to a wide differentiation of engineering. In its turn, this led to a too narrow focus of professional training of engineers and to their losing not only a holistic vision of the world, but a proper understanding of place and purpose of their industry in life-supporting system of humankind. This circumstance causes technocratic thinking of engineers and their loss of understanding of the fact that it's not a human who is intended for maintenance of machinery, but vice versa – machinery is designed to facilitate the work of people and improve their lives.

The modern engineer solves more complementary problems, which require new engineering thinking. Communication between engineering aspects of activity and the social ones, economic and environmental ones is typical for this kind thinking. Increasingly, engineer develops technical products, design of which involves appealing to such disciplines as engineering psychology, design, engineering economics, applied ecology and sociology and so on. The very labor practice and difficulties in domestic production, also have a negative influence on the formation of humanistic outlook of engineer. Maybe all these were the cause of so-called technocratic thinking which is the main obstacle to formation of understanding of students of technical higher establishments that it's very important to consider the human factor in their future professional activity.

It's known that an engineer is a socio-technical profession: about half of its work falls on the technique and the other to interacting with other people. Modern culture of engineer involves understanding and accounting principles and peculiarities of the functioning of a human at social and psychological system. After all, foremost, working conditions (temperature, noise, vibration, etc.), the parameters of work place, content and organization of work depend on engineering and design developments. And that is why the need to develop such qualities in engineers as responsibility, thrift, reasonableness in attitude as to a human as to our nature is clear to us.

Therefore, future engineer in a market economy along with creative technical thinking also should have strategic, environmental and economic thinking, a high level of communicative competence, and understanding of the general patterns of recurrence of industrial and economic development.

Hence we can conclude that in higher technical education there is a problem of overcoming technocratic tendencies and we should educate future engineers with a humanistic outlook in life, which promotes the preservation and development of both environmental and social systems [2].

Problems of research of training are broadly reflected in the pedagogical and psychological literature. Analysis of works of Ukrainian and foreign scientists allows us to

determine the directions of their scientific research. Thus, the grounding of humanistic, human-centered approach to education is made by A. Makarenko, V. Sukhomlynskiy, A. Aleksyuk, Sh. Amonashvili, Yu. Babanskiy, V. Bepalko, I. Bech, A. Vishnevskiy, I. Zyazyun, V. Kremen, I. Prokopenko, A. Savchenko, O. Sukhomlynska, and humanization of the educational process in the preparation of future professionals is made by L. Tovazhnyanskiy, A. Romanovskiy, S. Bogomolov, I. Gerasimova, V. Zinkevichus, A. Kolomiets, V. Kryzhanivska.

At the same time analysis of scientific sources grounds to assert that the problem of humanistic orientation of professional training of engineers in higher educational establishments has not been investigated sufficiently. There is no special educational research on the formation of humanistic orientation of professional training of future engineers. And the development of the complex of psychological and pedagogical conditions of formation of humanistic orientation of professional training is required.

Let's consider the basic conceptual approaches to definition of the personality and its orientation.

Personality is a person who has his own position, pronounced awareness of life, world outlook, to which he came in a result of prolonged labor. "Personality is only the person who treats the environment in a certain way; who deliberately sets his attitude the way that it manifests itself in all his existence" [3]. The general definition of personality gives K. Platonov: "Personality is a specific person as the subject of transformation of the world through his knowledge, experience and attitude to it." And further: "Personality is a person as the bearer of consciousness" [4]. Social and psychological definition of personality offers N. Kolominskiy, noting that "personality is a such kind of individual who is the subject of life and who can perform social functions and roles consciously" [5].

Analyzing the concept of "personality" we should recall the concept of V. Myasishchev, who argued that the personality is a complex mental formation, which is an integral psychological potential that is realized in the experiences and actions. Knowledge of personality, according to V. Myasishchev, allows to predict its likely response (internal and external) under certain conditions. Personality is characterized by the dominant attitudes, mostly to the people, inclinations, interests, needs, effort and ability to self-control, endurance of hardship and resistance to external forcing, the level and nature of skills and self-esteem, ideological level and nature of convictions [6].

Psychological definition of personality in expanded form is given by L. Bozhovich: "Personality is a person who has reached a rather high level of his mental development. And its most essential characteristic, when a person really becomes a personality, is that he can control chances and change the circumstances of life according to his goals and objectives, he also can control himself consciously. Of course, this characteristic applies to an advanced personality of adult (and not each!), but personality formation begins very early and continues throughout the life" [7].

Indication of a person, by which he becomes a personality, must be a certain orientation, which can be characterized precisely by this quality. In certain statements and titles orientation in this sense appears in the works of many authors. As A. Leontjev writes: "personality formation involves the development of aim-formation process and therefore development of activities of the subject" [8]. K. Platonov determines the orientation of the personality as a component of its structure, which includes several related forms of hierarchy: inclinations, desires, interests, viewpoints, beliefs. "In the orientation of the personality in general we have to distinguish the level, breadth, intensity, stability and efficiency" [9].

In determination of the content of orientation A. Asmolov writes: "... orientation is the integral narrative description of the structure of personality. To reveal it we need to switch from the principle of analysis of the structure of personality by elements to the principle of

analysis by unities and find the requirements to these unities of analysis of the structure of personality" [10]. In the works of B. Teplov orientation of the personality is considered as significant characteristic of personality's psychology, which is manifested in its susceptibility to certain activity [11]. B. Dodonov in the structure of personality distinguishes emotional orientation. He thinks that emotions perform the basic function in personality characteristics, and he defines the following types of orientation: altruistic, communicative, gloric, prasic, pugnic, romantic, gnostic, aesthetic, gedonic, aczitive [12].

We also have to focus on the fact what kind of the psychological content is included in the concept of orientation. Thus, by its genesis those are peculiarities of our mind which occur in most cases as a result of previous work of thinking [4].

Orientation of the personality in many scientific studies is considered in connection with the activities of some leading group of people.

Analyzing the works of L. Bozhovich, we conclude that the orientation of the personality is its primary structural component as the system of dominant needs and motives that determine the selectivity of attitudes and activity of the person. The main demonstrations of orientation are needs and motivations, value orientations, the level of claims, perspectives and goals of personality [13]. L. Bozhovich says: "The orientation of personality is the result of presence of a particular structure of the person's motivational sphere. The motives form gradually during the child's life, and they acquire leading role for this child and thus they subordinate all other motives. The presence of persistent dominant motives and activities of the child creates an orientation of his personality" [14]. Considering the stable structure of the child's behavior, L. Bozhovich includes stable system of relations in it, i.e. a system of incentives. Raising sustainable behaviors depends on the correct organization of the children's behavior and on the level of formation of motives, which provide this organization [14].

L. Bozhovich identifies the following main types of attitudes: attitude of the person to himself, to other people, to staff and society, to business. These basic kinds of attitudes correspond to types of orientation, which are defined by three groups of motives: collective, personal, business [14].

According to L. Bozhovich, the deepest and fundamental to the moral characteristic of the personality is the characteristic of its orientation from the point of view of the attitude of the person to himself and to society. Exactly this orientation is extremely essential for the formation of a child as a whole [14]. Further, when the orientation was formed or began to form, it becomes the integrating basis for whole mental activity of the individual. It is clear that whatever the strong orientation, it doesn't take an individual outside his social life. Dominant motives find their embodiment in orientation, that's why it is always efficient, i.e. it contains a commitment to the activity which always takes place in the society [4].

It should be noted that the goals, which a person seeks, can become his motive with time. And becoming a motive, they, in turn, can be transformed into personal characteristics and qualities. So this is important to create a model of humanistic oriented personality, whereby such a quality as humanism become a personal quality of engineers and will help them to understand other people, help provide effective support to the person that is forming.

In the process of study the structure of humanistic oriented personality of future engineer is defined. It includes the following components: humanistic type of consciousness, the system of humanistic values, self-criticism, the principles of ethical communication and environmental responsibility.

E. Fromm writes: "Humanistic consciousness is a readiness to listen to the voice of your own humaneness, and it doesn't depend on orders, given by anybody at all" [15]. From the standpoint of humanistic consciousness the basis of personality is his moral development, which is found in his system of beliefs, ideas, standards, assessments, that regulate his

behavior. Moral development is the level of learning of concepts of moral standards, the level of formation of moral feelings and moral behavior.

System of humanistic values is a set of ideas about the good and the evil, justice as a moral content of requirements to the professional conduct and actions (love for people, tolerance, responsibility, respect for the individual, etc.).

Availability of self-criticism ensures the formation of an adequate self-assessment of person's own capabilities, the ability to compare his behavior with the actions of others and, accordingly, to set a reasonable goal. Indicator of development of self-criticism is modesty. And it should be understood not as the absence of special features, properties, significance, activity, but as optimal expression of the characteristic of formation of humanistic ideal that is not compatible with panache, hypocrisy, familiarity.

Basic principles of ethical communication reveal the essence of personality much deeper and they include:

- 1) mutual courtesy;
- 2) tact;
- 3) ease (naturalness, looseness, but not familiarity);
- 4) rationality;
- 5) obligation.

Environmental responsibility is moral and environmental quality, which primarily consists in an adequate attitude of the person to the nature and summarizes all the main features of such categories as responsiveness, parsimony and humanity. Environmental responsibility is in the sense of duty, in such acts, deeds and attitudes of the individual to nature, which correspond to moral principles and legal norms.

Based on the structure of humanistic oriented personality of future engineer, we have defined a system of criteria and indicators of its formation.

The first criterion is the content one, which allows us to find fullness and sensibility of relevant knowledge. It may include such factors as the understanding of the humanistic concepts as "humanism," "humanity," "subject-to subject interaction," "humanistic orientation of personality," "humanistic code of personality", the presence of basic and specialized knowledge of humanistic consciousness and responsibility.

Value-emotional criterion allows to identify the level of emotional and sensory perception of the environment. This is an adequate attitude of the person to himself as to the subject of social coexistence, the positive "I-conception", an objective person's assessment of the presence of spiritual and moral values in himself and in others, knowledge of "humanistic code", which is necessary for the formation of humanistic orientation of personality of future specialist that includes love for people, tolerance, kindness, benevolence, courtesy, tact, dignity and decency.

Activity criterion allows to identify the ability of future specialist to humanistic oriented activities in society. It includes the following indicators: ability to apply psychological knowledge to self-actualization and self-improvement, readiness to subject-to subject interaction, the highest level of formation of humanistic type of consciousness, presence of skills of humane behavior.

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І.Ю. Нечепорчук

ПРО ГУМАНІСТИЧНУ СПРЯМОВАНІСТЬ ПРОФЕСІЙНОЇ ПІДГОТОВКИ МАЙБУТНЬОГО ІНЖЕНЕРА

У статті розглядається проблема формування гуманістичної спрямованості професійної підготовки майбутнього інженера як необхідна умова вищої технічної освіти. Висвітлюються проблеми, які виникають в результаті вузької спрямованості професійної підготовки майбутніх інженерів. Проаналізовано основні концептуальні підходи до визначення особистості та її спрямованості. Визначено структуру гуманістично спрямованої особистості майбутнього інженера та розкрито її компоненти. На основі структури гуманістично спрямованої особистості майбутнього інженера визначено систему критеріїв та показники її сформованості.

И.Ю. Нечепорчук

О ГУМАНИСТИЧЕСКОЙ НАПРАВЛЕННОСТИ ПРОФЕССИОНАЛЬНОЙ ПОДГОТОВКИ БУДУЩИХ ИНЖЕНЕРОВ

В статье рассматривается проблема формирования гуманистической направленности профессиональной подготовки будущего инженера как необходимое условие высшего технического образования. Освещаются проблемы, возникающие в результате узкой направленности профессиональной подготовки будущих инженеров. Проанализированы основные концептуальные подходы к определению личности и ее направленности. Определена структура гуманистически направленной личности будущего инженера и раскрыты ее компоненты. На основе структуры гуманистически направленной личности будущего инженера определена система критериев и показатели ее сформированности.

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