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SOCIAL EFFICIENCY OF BELARUSIAN HIGHER EDUCATIONAL SYSTEM

Abstract. The article deals with the problems of social efficiency of the Belarusian higher education system. The system is considered in the context of theoretical and applied aspects of measuring the social functions of higher education.

Key words: higher educational system, social functions of higher education, social effectiveness of higher education.

Statement of the problem. The transition of humanity to the post-industrial stage means the society's transition to a regime of constant dynamic instability. It radically changes both the sphere of economy as a whole and sphere of the individual's professional activity, constituting fundamentally new targets for the education system alongside. Historically, under industrialism, education produced "diligent and obedient employees who perform predictable tasks. In a modern world other problems should be solved. To live in an unstable world means solving endless totality of unfamiliar tasks against numerous fuzzy and dramatically changing goals and circumstances" [1, p. 28-29]. The given moment makes actual the need for rational socio-cultural and institutional solutions aimed at modernizing higher education as a social institution, which should ensure the progressive sustainable development of mankind.

In a postindustrial society, a need for a great variety of specialists who possess both professional and cultural competencies is sharply increasing. Such specialists should constantly receive and master new knowledge and technologies, they should be competent to make independent and responsible decisions in business, professional sphere or everyday life. That's why in a modern world higher education is responsible for the professional formation and development of an individual's personality through specialized vocational training and education. It results in obtaining a specialty and qualification, mastery of professional activity needed for the individual's engagement in socially useful work due to his needs, interests and abilities.

The point is that under fundamentally new historical conditions almost "all basic social functions of the institution of education, as they developed in the era of classical modernity, are exposed to erosion in one way or another today that does not allow the institution to fully fulfill its purpose" [2, p. 99]. Moreover, the lag of the institution of education behind the social dynamics accompanied by the divergence of transmitted social senses and value meanings with the developed social structure of the post-industrial society makes its dysfunctional potential vivid in a modern society as a whole. Therefore, from the viewpoint of its tasks, the given aspect actualizes the

importance of quality of the national higher education and parameters of fulfilling the whole totality of social functions.

In modern conditions, the problem of social efficiency of the national system of higher education is relevant for several reasons.

First, globalization of economic relations has changed the institutional and sociocultural context of the higher education system, i.e. economic, social, political and legal conditions for the individual's professional socialization. Under globalization there is a radically increased impact of market on the structure, functions and content of a modern education system. In the modern world it has resulted in making professional education an integral component of rational market relations. Therefore, higher professional education was made a subject of commercial transactions and began considered from the viewpoint of economic efficiency, expediency and investment attractiveness. Here spoken about are both determining the development of the relevant industries, services and agriculture, and personal investment in human capital. Correspondingly, the logic of market relations of various actors determined imparting a dynamic, contradictory and opportunistic character to the process of production, distribution and consumption of specialized knowledge, making the latter dependent on various social processes in many parameters.

Second, modern market economy makes increased demands of quality of labor force, employees' educational, professional and qualification level. It requires their constant social and professional mobility, considered as criteria for individual competitiveness. In modern conditions, formation of human capital, development of human resources and training of qualified personnel are key tasks for the national economy to ensure a sustainable development of the Belarusian society and increased level of the nation's competitiveness on a global scale. The given aspect actualizes the importance of human capital as a complex of an individual's knowledge, skills and abilities that contribute to the growth of his productive power as a factor in the economic development of society and state. It is no coincidence that in the global world "preservation and development of higher education is largely associated with preservation and development of its human capital" [3, p. 506]. Accordingly, economic costs of training and educating an individual, and development of his qualities such as talent, creativity and initiative, turn into a highly profitable investment. So, the focus is made on two important areas: requirements for the organization of the educational process, activities of the teaching staff, effectiveness of university administration, in particular, and quality and parameters of functioning of the national system of higher professional education, in general. In Belarus, it is the given system that largely ensures the growth of volume and quality of human capital in society. It contributes to the individual's obtaining the knowledge accumulated by the society, acquiring new knowledge, its producing and practical application, and developing competencies.

Third, the logic, principles and mechanisms of development of the higher education system, its performance of the corresponding functions in the society are socially conditioned and culturally determined. It actualizes study of the problems of social processes' impact on the institution of higher education in two aspects: development of requirements for the parameters and quality of professional training of specialists, and assessing the prestige of certain professional and status positions in the social sphere, labor market, politics and economy. For instance, an urgent problem for a modern Belarusian society is a persistent disbalance between the needs of the national labor market for workers and specialists with vocational and secondary specialized education and a simultaneous overproduction of personnel with higher education of the socio-humanitarian profile (economists, lawyers, journalists, designers, sociologists, marketers etc.). But the national economy

cannot absorb the existing volumes of the latter, since the republican labor market is not sufficiently developed and initially it does not encompass enough jobs for specialists in this profile. In general, educational needs of the Belarusian applicants, their views about the prestige of certain status positions and their resource provision in a modern Belarusian society determine a certain dysfunctionality of the mechanisms of interaction between the system of higher education and labor market. At the same time, certain inertia of the educational system and rigidity of social attitudes of the teaching staff turn an easy and inexpensive solution to a problem.

Fourth, the social context of the existence of the post-Soviet society is social transformation that entails a significant change in its entire institutional infrastructure, including education. After all, “the educational system is extremely sensitive to changes in the social environment in a rapidly changing world, so it cannot but change with the advent of new experience, new technologies, with changing the needs of society and an individual. It concerns not only the content of the transmitted knowledge and skills, but also the educational process itself and the education system as a whole” [4, p. 106]. Correspondingly, long-term transformational processes have led to a number of negative trends in the higher education system. Among them are commercialization of higher professional education, changed mission of education when the task of ensuring its economic efficiency prevails over the task of its social return, narrowed space of university autonomy, lagging of the educational process behind the dynamics of scientific and technological progress, loss of monopoly by universities on the scientific provision and staffing for production and public administration, increased average age of the teaching staff etc. In general, these trends entail a steadfast transformation of a classical university based on Ancient rationalism and humanistic ideals of the Enlightenment, into a business system of higher professional education. Such a system applies the principles of economic efficiency measured in the categories of profit, budget growth, optimization of costs and revenues, and employees’ productivity [5, p. 67-68]. But it is far from the best effect when higher education performs its social functions as the most important socialization institution in a modern society.

Analysis of recent research and publications. In social and humanitarian knowledge the issues of content and dynamics of the functions of higher education are discussed in works of such researchers as E. Durkheim, R. Merton, K. Mannheim, P. Bourdieu, B. Readings, I.S. Bolotin, A.A. Verbitsky, G.E. Zborovsky, G.M. Dzhamaludinov, V.A. Ivanova, V.A. Klimenko, S.G. Kordonsky, V.T. Lisovsky, A.M. Osipov, V.A. Simkhovich, G.F. Ushamirskaya, S.A. Sharonov, F.E. Sheregi etc. In general, social functions of the given institution at the societal level actualize a set of tasks for reproducing certain social relations and a corresponding model of social structure. Here the following functions can be distinguished: vocational and educational (training of employees of various categories), selective (personnel and professional selection), innovative (generating new knowledge), socio-constructive (creating new social communities and institutions), development of human capital (developing a system of competencies, necessary to ensure social dynamics). At the personal level one can distinguish such functions as those of socialization (an individual’s introduction into various spheres of life), adaptation (adaptation to the social practices existing in society) and formation of social competence (formation of communication skills), alongside with sociocultural (an individual’s interiorization of the meanings and senses of the dominant culture) and instrumental (formation of socially significant skills and abilities).

In the light of the globalization processes that entail transformation of both the institutional grounds of education and its long-term target and value priorities, of interest is the problem of how

the country's population assesses the fulfillment of social functions of the national system of higher education. The assessment should be made about identification of social problems and trends in education profiles, and development of recommendations for state bodies to optimize the state youth policy and state educational policy in short- and medium-term perspectives.

The methodology of sociological analysis of the national system of higher education should be grounded on a system-based approach that implies understanding higher professional education as a subsystem of society with its certain characteristics, structure, functions, patterns and stages of development. In a broad sense, higher education is defined as a system of educational relations, norms and institutions of the society designed to ensure a continuous process of professional socialization of individuals for the labor market, maintenance of social stratification and social mobility in the society. In a narrow sense, it is defined as a level of education oriented to develop the student's personality spiritually, morally and physically, ensure his professional development, specialized theoretical and practical training that ends up with certifying the appropriate qualification characteristics to the graduate.

Purpose of the article. In general, the whole complex of heterogeneous factors and trends that determine development of the national system of higher professional education and lay the trends in development of the Belarusian labor market actualizes a sociological study of social efficiency of the given system's functioning in the context of socio-economic transformations. The research of this kind objectively implies solution of the following theoretical and applied problems: study of the main theoretical and methodological approaches to learning the social functions of higher professional education in native and Western sociology; study of socio-economic and demographic aspects of functioning of the national system of higher professional education; determination of the current state of the system in the context of quality of its social functions' realization in the profiles of education; identifying of its social dysfunctions and correspondingly, main directions to improve efficiency of its functioning. A sociological study of how a modern higher education performs its social functions, as well as of how these functions are developing under the impact of the transformational processes, seems to be of interest from both theoretical and applied points of view.

Presentation of the research main material. Higher education as a social institution performs a number of specific functions which play an important role in reproducing the system of social relations and act as most stable directions of its impact on the main spheres of social development – economy, labor market, social sphere etc. In the context of the system-based approach, the social functions of the system of higher professional education are manifested in a specific way as far as social subjects of different levels – society, groups, individuals – are mentioned. From the viewpoint of G.M. Dzhamaludinov, professional training of a specialist, added with his acquiring of a certain level of culture, serves the main content of the given impact, and a professionally socialized individual's conflict-free inclusion in various spheres of society serves the goal [6]. It makes the grounds for constructing a functional matrix that enables to describe functioning of the higher education system at the societal level in dynamics; in the matrix the lines show external and internal functions, and columns – manifest and latent functions (table 1).

Matrix of social functions of higher education

	External functions	Internal functions
Manifest functions	<ul style="list-style-type: none"> • communicative • regulatory • economic • stratification • socialization 	<ul style="list-style-type: none"> • organizational • productive • developing • educational
Latent functions	<ul style="list-style-type: none"> • social structuring • redistributive 	<ul style="list-style-type: none"> • stigmatization • making a group of equals

Source: own development

It is clear that external functions are the ones which connect the system of higher professional education with every other social institutions and society as a whole, and internal functions are those ones which ensure the purpose of the social institution of higher education as a subsystem of society. The distinction is proved by their theoretical interpretation (table 2).

Table 2

Social functions of the system of higher education and their theoretical interpretation

№	Function	Interpretation
1	External manifest functions of the system of higher professional education	
1.1	socialization	means transferring to new generations the approved social norms and cultural values associated with the development of professional social roles and statuses at a certain stage of personality formation (the stage of transition of primary socialization to secondary).
1.2	communicative	defined as transmitting and processing the information based on scientific knowledge.
1.3	regulatory	consists in the activity of the vocational education system as part of the system of social control over the behavior of individuals which is ensured by coordination of the educational process and social relations that develop in it on the basis of the values adopted in the given system, formal and informal norms and sanctions, as well as ways to achieve order and compromise.
1.4	economic	associated with the development of human resources for various sectors of production which directly determine their economic efficiency.
1.5	stratification	defined as ensuring social hierarchy in the society based on the appropriate level of education acquired by individuals seen as a potential channel for their upward vertical social mobility, as well as a way of social selection in individuals' professional training.
1.6	innovative	associated with realizing the potential of the educational system to create new theoretical knowledge or practical means significant for improving the activities of both the system itself and other social institutions, organizations and particular individuals.
2	Internal manifest functions of the system of higher professional education	
2.1	organizational	defined as a set of actions oriented to create and ensure functioning and development of organizations in the educational sphere, establish and order the relations of individuals in the educational process and administering of educational institutions.
2.2	productive	contributes to creating intellectual products (a set of knowledge, understanding, skills, results of research-scientific and technical-

		inventive and other creative activities of students and teachers) as a result of an organized educational process.
2.3	developing	develops students and teaching staff's personal competencies and abilities in the course of study programs.
2.4	educational	provides a set of impacts in the "teacher – student" system directed to transfer socio-cultural codes to new generations.
3	External latent functions of the system of higher professional education	
3.1	social structuring	means distinguishing a social stratum of intelligentsia associated with serving the institution of education and selecting a social group of young learners who have acquired properties of self-organization.
3.2	redistributive	means financing of the educational system (at the expense of budget funds, personal funds of citizens etc.).
4	Internal latent functions of the system of higher professional education	
4.1	stigmatization	defined as distinguishing (verbal and non-verbal, formal and informal) on the basis of the student's success in studies, teacher at work, as well as other characteristics of their personality.
4.2	making a group of equals	means making groups of peers acquiring general group features (in-group favoritism, separation from the environment according to the model "friend or foe" etc.), wherein an inadvertent formation of new social needs of the young takes place.

Source: own development

In the structural aspect, the Belarusian system of higher education embraces a totality of state and private institutions that suggest study programs of higher education (classical and specialized universities and institutes, higher colleges).

The National Statistical Committee of the Republic of Belarus provides the following information (the beginning of each academic year is the point to fix the number of institutions of general secondary, vocational, secondary specialized and higher education, and number of students in them) that in general characterize the development of the Belarusian system of professional education over the 18-year period (table 3 [7, pp. 91-93]).

Table 3

Key indications of education

	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Number of vocational education institutions	248	241	240	235	233	232	229	229	226	219	213	206	196	182	180
Students in them, thousand people	137,7	114,6	114,4	105,1	99,0	105,7	106,0	98,6	79,9	74,6	72,8	72,2	70,3	66,9	65,7
Number of institutions of secondary specialized education	156	204	205	204	206	211	214	220	225	231	231	231	230	226	226
Students in them, thousands of people	150,3	154,1	152,5	155,0	157,3	166,6	167,6	162,9	152,2	138,4	129,0	121,3	117,8	114,1	113,3
Students per 10,000 people of population	151	160	159	162	165	175	177	172	161	146	136	128	124	120	120

Students admitted to institutions of secondary specialized education, thousand people	54,0	50,9	48,8	51,8	53,9	58,7	54,9	51,9	48,2	43,8	40,9	38,9	38,9	38,3	38,4
Specialists finished institutions of secondary specialized education, thousand people	43,8	49,3	44,3	43,1	44,0	42,5	45,3	46,2	48,7	47,7	41,4	39,0	36,3	36,4	33,8
Specialists per 10,000 people employed in the economy	99	112	99	95	95	91	97	99	106	104	91	87	82	84	78
Number of institutions of higher learning	57	55	55	53	53	53	55	55	54	54	54	52	51	51	51
Students in them, thousand people	281,7	383,0	396,9	413,7	420,7	430,4	442,9	445,6	428,4	395,3	362,9	336,4	313,2	284,3	268,1
Students and undergraduates per 10,000 people of population	283	398	414	433	442	453	472	476	459	425	392	365	342	315	298
Students admitted to institutions of higher learning, thousand people	68,4	90,5	86,6	95,4	91,5	97,8	100,5	96,0	88,1	68,7	63,4	63,1	62,7	61,8	58,9
Specialists with diploma of higher education graduated from institutions higher education, thousand people	38,7	53,6	61,4	66,9	68,8	74,0	73,3	75,8	84,6	82,7	81,1	78,0	74,6	81,0	64,9
Specialists per 10,000 people of population	87	122	137	148	149	159	161	168	190	188	187	183	181	200	165

Source: Statistical Yearbook of the Republic of Belarus, 2019

To identify and assess the factors that determine the development trends of the Belarusian system of higher education, a SWOT analysis was used. The known methodology and logic of SWOT analysis suggests dividing the factors that describe the object of research into four categories: Strengths, Weaknesses, Opportunities, Threats. Strengths and Weaknesses are factors of internal environment of the object under study, and Opportunities and Threats are factors of external environment. Statistical, informational and analytical materials on development of the Belarusian higher education system over a twenty-year period constituted an empiric base for a pilot research. They were selected for a non-representative sample according to the corresponding thesaurus. The results of the SWOT analysis, i.e. generalized assessment of how the country's higher education fulfills its social functions, as well as of their dynamics under the influence of transformation processes, are suggested in table 4.

Table 4

Assessment of fulfillment of social functions by the Belarusian system of higher education

STRENGTHS	WEAKNESSES
<p>High general level of professional training of the teaching staff working for higher education institutions.</p> <p>Sufficient number of study programs focused on training specialists in high-tech sectors of the national economy (IT, biotechnology, nanotechnology, pharmacology, etc.).</p>	<p>Reduced number of students both in absolute terms and per 10,000 people of the population entailed by negative demographic processes.</p> <p>Low level of provision of higher education institutions with licensed software.</p> <p>Low level of social prestige of teaching work and teaching activities.</p>

<p>High competitiveness of specialists with higher technical education in the labor market, demand for their professional competencies and sufficiency of their qualifications to perform certain types of work.</p> <p>Implementation of the entrepreneurial university model in educational practice that determines intensification of the innovative function of the country's higher education.</p>	<p>Weak relationship between the needs of the national economy and training of specialists with higher education who possess the required qualifications.</p> <p>Low academic mobility of students and teaching staff.</p> <p>Low growth rates of the number of foreign students studying in Belarusian higher education institutions.</p> <p>Incomplete structural reforms needed for Belarus' full integration into the European higher education area.</p> <p>Incomplete creation of the National Qualifications Framework as a set of mechanisms for legal and institutional regulation of the labor market's demand for workers' qualifications and education system's supply of qualifications.</p>
<p>OPPORTUNITIES</p>	<p>THREATS</p>
<p>Developed infrastructure of the higher education system providing high-quality training of specialists in a wide range of specialties and specializations.</p> <p>Sufficiently high level of provision of institutions of higher education with modern computer technologies.</p> <p>Necessity of long-term professional training of a certain type of specialists (physicians, nuclear power engineers etc.) with theoretical aspects of training attended by the applied ones.</p> <p>Significantly increased number of specialists with higher education per 10,000 thousand people of the population employed in the national economy that determines the demand for their training in higher education institutions.</p> <p>A significant proportion of students and undergraduates of the profile "Communications. Law. Economy. Management. Economy and Organization of Production" that creates the grounds for the intensive development of the service sector in the national economy.</p>	<p>Aging of the teaching staff with simultaneous decreased rates of its reproduction through postgraduate education.</p> <p>Actual absence of academic autonomy of higher educational institutions and non-inclusive participation of their employees and students in their functioning.</p> <p>Insufficient level of students' professional training in private higher education institutions.</p> <p>Decreased number of young people in the structure of modern Belarusian society that entails a trend to decreased number of applicants in the medium- and long-term perspective.</p> <p>Growing struggle for applicants in the global educational market that creates serious challenges for the national system of higher education.</p>

Source: own development

The results of the SWOT analysis show that one of the most significant trends which is of interest for a sociological study of the parameters of social efficiency of the Belarusian system of higher education, is a significantly increased number of specialists with higher education employed in the national economy observed recently over the entire post-Soviet period of the country's development. It actualizes the issue of human capital parameters and logic of its formation by the national system of higher education.

On the one hand, in the context of global trends, the quantitative growth of specialists with higher professional education in the country can be considered as actualization of the lifelong education model by the Belarusian society. The given model eliminates the rigid framework of the traditional individual biography with formalized transitions between the stage of education and stage of employment and implies practical ensuring of horizontal and vertical integration of

education. By its logic, vertical integration is considered as an opportunity for an individual to join the formal educational system at any stage of his life, and horizontal one – as education covering a totality of formal and informal areas of social life. Correspondingly, the logic of the given model presupposes a constant renewal of knowledge and skills needed by workers in their professional activities, a constant increase of their educational level and increase of the level of individual qualification. No doubt that it is the institutions of higher education that can most effectively adapt their study programs to the needs in professional training of various categories of the population which are interested to develop a professional profile competitive in the labor market.

On the other hand, the post-Soviet society is characterized by transformation of the educational system into a powerful differentiating factor that enhances social differences between representatives of different groups in terms of vertical social mobility. As a result, consumers of educational services focus their attention on the formal and symbolic component of higher education they receive (university status and specialty prestige), not on its curriculum component (qualification and professional skills) that leads to a higher demand for highly prestigious specialties with a simultaneous reducing demand for other specialties (for instance, of veterinary, pedagogical or agricultural profile).

Conclusions. Thus, the theoretical conceptualization and sociological explication of the social functions of higher professional education enable to identify and describe the parameters of the national system's functioning at the societal level in dynamics which under conditions of transformational processes in the Republic of Belarus is associated with two interrelated things: a totality of transformational processes taking place at all levels in the institution of higher education, and the individuals' changing social needs and expectations about the higher educational system and labor market.

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