

Characteristics of educational management model

“Theory of Education Management Process”

Management of education in modern conditions should be focused on result. Final result of an educational system is a kind of personality of an individual, capable to provide competitiveness of national economy, high level of spiritual culture of the society, development of high technologies. The problems of educational resources management that arise as part of modernization in education make it relevant to work out the theory of education management process. The main distinctive feature of this theory is its innovative character.

Using pedagogical innovation studies as methodological background for designing development strategy of modern education is quite reasonable. Meanwhile, making innovation studies a new scientific area has no prospects, due to, firstly, synergetic character of innovations, and secondly, the fact that innovations in education can cause both positive and negative effects.

However, estimation of innovations introduced into an educational system can be correlated with describing the planned result and grounding conditions necessary for its achievement. In this respect, use of foresight methodology can be quite useful. This methodology consists in generalization of the existing isolated expert provisions. It enables to define the most possible strategy of scientific and technological progress. Education, considered as foresight subject, assumes a complex structure of decision-making processes where various groups of population are involved.

The approach to view prospects of development as challenges to be met [5] is of special importance for education. Challenges and possible responses to them should determine content of innovative processes in education. Education may take part in producing innovations only in case some features of modern innovative economy are adapted for the sphere of education. Such features include:

- Maximum flexibility and nonlinearity of organizational forms of production and social sphere;
- Including the processes of knowledge gain and update into all industrial and public processes;

- Talent, creativity and initiative of a personal should be major resources for economic and social development;
- Continuous, as a rule, unpredictable changes of technologies (including social) within short time periods;
- Changes in social positioning backgrounds: from material capital and once mastered trade to social capital and ability for adaptation;
- Two innovative contours. The first contour is connected with creating and promoting innovations, the second - with their selection and development [4].

The above mentioned features put forward certain requirements to the results of education. They include demand for mass character of creative competences acquisition, determining focus of teaching on individualization, recognition of high value of talent, organization of lifetime education.

Thus, innovation is the result of a process. P.F. Drucker mentions seven sources of innovations: the unexpected, incongruities, process need, changes in the industry or market structure, demographic changes, changes in public perceptions and values, and new (both scientific and unscientific) knowledge. At the same time, P.F. Drucker, recognizing scientific development as one of the sources of innovations, emphasizes that new knowledge, especially new scientific knowledge, is not the most reliable and predicted source of successful innovations [5].

Modernization is the process of educational system transformation. It means that the problem of elaborating process characteristics of management in education becomes relevant.

We understand the process as a kind of activity using certain resources that is specially managed with the purpose of transformation of an object/subject from the outside (considered as an input) leading to its transformation (seen as an output).

The theory of managerial process in education under conditions of modernization can be seen as a set of interconnected components - processes substantially characterized by modern education development strategy.

Set of the interconnected components-processes is presented by: management of education development; management of institutionally-organized educational

systems; management of modernization risks. Each of the above mentioned components-processes can be decomposed to a number of the interconnected sub-systems, aimed at reaching definite results. The range of sub-processes is variable, dynamic and includes relevant directions describing modernizing transformations in education. The result received as an output leads to subsequent choice of sub-processes (and basic process) at an input stage.

The process output, or in other words, its result, can be considered as a criterion, a parameter of management efficiency.

We'd like to note that output of sub-processes can become a closing stage. In this case, the objective in view is reached; the result corresponds to the purpose. Modernization initiatives in modern educational system make it necessary to develop a complex of sub-processes with precisely stated, closing output. It will enable to solve strategic problems of education development stage by stage.

At the level of theoretical forecast, that is, defining a complex of components-processes, it is necessary to state the degree of participation of the state, society and business. Sub-processes of strategic and tactical levels demand an owner and a head. In other words, the owner is the official who is responsible for productivity and efficiency. The head exerts current control over performance of certain sub-processes.

Thus, theory of management process is an analog model of strategies/tactics of education development. The theory has the following features: system-synergetic organization, conceptualization and adaptability.

Theory of Education Management Process as Methodology for Intramural Quality Management. Basing on the analysis of the literature on the issue under study, we find it possible to introduce the theory of education management process that can be considered as conceptual model for intramural quality management in establishments of higher education.

Regulatory frameworks of the conceptual model of quality management in modern higher school are based on the following laws of the Russian Federation: "Education Act", "Higher and Post-graduate Professional Education Act", "State Educational Standard", norms and principles which have been developed in educational establishments of higher education as well as norms and requirements of prognostics character. Purposes of education quality control system can be, in

their turn, decomposed into general and specific objectives, reflecting strategic approach to constant perfection of quality known in the theory of quality management referred to as Kaizen (continuous improvement). We'd like to explain that Kaizen is the philosophical system directly aimed at increase of innovative potential and aspiration to innovations, supported by harmony and good balance of the processes of changes. The overall aim is focus on creating optimum conditions for keeping the necessary level of good quality of professional training for future experts.

Among specific objectives, which can be further specified as practical tasks, we'd like to mention the following ones:

- Creating adaptive educational space;
- Designing education content taking into account universal and national values;
- Creating multilevel multifunctional programs;
- Maintaining a choice of levels and quality of education equally accessible for each person;
- Fundamental character of content-semantic system of knowledge;
- Improvement of general pedagogical and certain subject-connected teachers' skills;
- Focus of future experts on encouraging activity based on understanding the importance of professional training;
- Developing ability for self-management (self-development, self-education and self-realization) in participants of educational process.

The projected model of quality control system is represented by management model typical of educational establishments of higher education. It corresponds to TQM ideology which does not separate quality control system from the general control system of the organization.

Functioning of intramural quality management model is adjusted to the system of principles presented at different levels: general scientific, strategic, practice-focused, tactical, more specifically scientific and factorial.

The subsystem of principles of general scientific character is based on methodology of the system approach applied to intramural quality management and put into practice through the allocated subsystem of principles. They include the following ones: integrated unity, result orientation, multi-level character, and controllability.

According to the principle of integrated unity, control system of quality is considered as complete formation which components exist only owing to existence of the whole. Phenomenon “quality” exists only as that whole.

Result orientation principle makes it necessary to take into consideration system-forming factors, namely, main and functional objectives. These objectives mean the results to be reached, i.e. good quality in education.

Multi-level principle characterizes quality control system in the higher school as a subsystem of meta-educational system.

Controllability principle makes it possible to consider system effectiveness of quality management from the positions of objective laws and optimum control and self-management.

The subsystem of the principles providing strategic level is based on synergetic approach methodology, characterized by prevalence of intra-system connections between components of educational establishment over external influences on them. Thus, the most effective method of management is management through self-organization mechanisms. Synergetic approach methodology enables us to single out the subsystem of quality management principles, including the following ones: principle of managing parameters performance; bifurcation principle; principle of self-organization; irreversibility principle; principle of taking into account management by small influences; principle of differentiation while influencing.

Principle of managing parameters performance provides an opportunity to transform educational system from its current condition into a qualitatively new one, changing final number of parameters.

Bifurcation principle means that when managing parameters reach certain values, behavior of educational system varies in an uneven way, passes through an unstable condition and has changeable character.

Principle of self-organization – presupposes transition from disorder, chaotic condition to a qualitatively new, well-ordered one; it is the feature of an educational system itself and is determined by the mechanism of self-management.

Irreversibility principle. Any outbreaks in an educational system, caused by operating influences, fade, having fixed in steady forms. Thus, there occurs transformation of influencing energy into the energy of structural connections. Irreversibility of this transformation means irreversibility of administrative influences.

Principle of management by small influences. Acting jointly, separate factors, processes and subsystems of educational system render mutual influence on each other. Such influence can change character of influence dramatically. As a result, collective influence of several factors (internal or external) is always far from their simple addition. Combination of weak forces can lead to their superiority over stronger ones that determine character of management by small influences.

Principle of differentiation at resistance. The same influences on educational system cause various forces and effects, depending on the degree of resistance to these influences. Hence, depending on a situation, operating influences lead to a wide range of consequences from radical transformation of the system up to minor alterations that take place at the level of separate substructures.

The subsystem of principles providing practice-focused level of quality management is based on the concept of General Quality Management and includes the ones that follow:

- Principle of openness assuming views about higher school as an open system, positively cooperating with an environment;
- Principle of advancing development focused on priority of innovative activity of higher educational establishments;
- Principle of the processes perfection, defining the strategy of positive change as basic one.

The subsystem of principles, referred to tactical level of quality management, is based on anthropological approach and includes the following issues:

- Principle of ecological compatibility assuming meeting ethical standards and requirements, providing soft and humane influence on subjects of an educational system;
- Principle of taking into account unique features of personal identity, determining prospects of person development and social integrity of higher educational institution as a whole;
- Creativity principle that means priority of creative, research activity of subjects of educational process.

Subsystem of quality management principles based on cultural, personal, pragmatist, activity and hermeneutic approaches dematerializes level of pedagogical knowledge. Basic principles include the following:

- Principle of pedagogical process being oriented at the unique personality of a student, demanding to create certain conditions for self-development of inner resources and creative potential of respondents in educational space of higher school;
- Principle of dialogue that means finding of humanistic content during dialogue and creative interaction with all participants of pedagogical process, focused on development of professional, social and humane personal competences;
- Principle of appealing to a student through the culture, considering phenomenon of culture as determinative for development of personal and professional qualities;
- Principle of relevant culture components, determining the content and process side of education from the point of view of its value and sense, i.e. humanitarian essence;
- Principle of hermeneutic development of culture meanings, that is, acquiring values and notions as a result of involvement into a comprehended subject by the person; we mean that understanding is based on completeness of explanation.

Creating quality control system in modern establishment of higher education demands the consecutive solution of the following tasks:

- To define and state the objectives in the field of education;

- To reveal requirements of labor market and potential employers;
- To establish basic complex of processes as an open model;
- To develop and adapt management methods to the processes, providing functioning and development of university;
- To provide documentary record of quality management system;
- To arrange monitoring processes, carry out internal audit.

Process approach was stated in ISO Standard 9000 - 1994, and began to be put into practice as soon as ISO Standards 9000 dated 2000 was introduced. Thus, the process model of quality determined by standards and GOSTs (Russian State Standards) means that higher education should meet the needs of consumers and labor market by means of management of processes.