

A Process Approach to Management of an Educational Organization

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Abstract

Directions for an educational organization development meet the requirements of society to the effectiveness and quality of educational activities in high dynamics of external and internal environment. The article examines the potential of the process approach, which considers management as a continuous performance of certain interrelated activities complex and general management functions when developing a quality management system of an educational organization. In the submitted article the components of the educational activities process are defined, which are based on the quality standard of the final product. This article is intended for educators, researchers, heads of educational institutions, employers, customers of educational services, education management organizations employees.

Keywords: vocational education, an educational organization, management, a process approach, system of quality management

1. Introduction

1.1 Background

Quality, as a scientific theoretical problem, involves economic, social, educational and cultural aspects of education, and is an integral characteristic of educational activities and their results. To provide quality assurance in accordance with the specified requirements for learning outcomes from consumers, there should be quality management systems present, meeting not only the requirements of vocational education modernization, but also the existing organizational and technological conditions of educational institutions, their innovative development.

The current trends in the national education (integration, globalization, internationalization, regionalization, democratization, diversification, humanization, informatization) lead to the necessity to understand education as a continuous process, and not as a rigid structure, therefore only through “processes quality management in the educational system it is possible to provide quality management of the educational process results” (Selezneva, 2002). The purpose of quality management of training in an educational organization is to improve the quality of educational activities and to improve the quality management system of the organizational performance in the sphere of rendering the educational services to the consumers.

1.2 Status of the Problem

Strategic economic changes (Gorbashko & Bonyushko, 2011) such as: growth of small and medium-sized businesses; changing of specialists' production functions; development of services and social-oriented functional areas; need for universal specialists; intensive quantitative and qualitative development of demand for some professions, being defined by interaction between enterprises and the government processes, which are new to Russia; increase in international cooperation, as well as informational, intellectual, and other connections, that is modern integration trends (Shaidullina et al., 2015), private requirements for large-scale involvement and availability of vocational education in the ratification of the Bologna process provisions dictate the need for

changes in standards of education and management paradigm in educational organizations.

Achieving the required level of vocational education quality, reflected in educational standards and requirements of the labor market, requires innovation, both within the educational process, and in managing it. Exactly these peculiarities, as well as the presence of only recommendations and guidelines in this area, create disunity and diversity of quality management systems which are introduced into the management of educational institutions.

1.3 Methodological Framework

The concept of “education quality” is fundamental to all participants in the educational process and the customers of educational services. When viewed through the prism of conceptual methodological aspects, then one of the methodologies can be considered a concept of total quality management, which extends to education sphere, as well. By their nature, these standards do not regulate any requirements to quality, they are written for general use in all branches; rely on documenting work techniques and management methods to meet the needs and expectations of consumers. In the function of the consumers of the educational process results act both students themselves and their families, businesses-employers, educational institutions, society and the state, which will use the potential of the graduates.

After analyzing the works of many researchers on education quality problem (Gershunsky, 1993; Matros, 2008; Potashnik, 2002; Shamova, 2005), we see that the contents and nature of the basic concepts are disclosed, in the ongoing educational standards the system of external and internal indicators of education quality at the federal level is defined, a theory of the quality of education and the theory of measuring it are proposed (Novikov, 2009; Muhametzyanova, 2005; Ibragimov, 2002; Levina, 2012) in the modern research papers the education quality issues are dealt with from the standpoint of the management (Koshkareva, 2006; Bermus, 2002; Nuzhdin, 2003).

In our opinion, the quality of education is a complex, multi-component object for management. Therefore, in recent years the quality of education is more and more associated with its management and continuous improvement of all educational processes, and that provides the educational activities result, satisfying the consumers.

2. Materials and methods

2.1 Analysis of Approaches to the Management of an Educational Organization

Search for the effective management of the educational processes is carried out from different perspectives and approaches. Among them, there are a system-based, a program-oriented and goal-oriented, a situational, a professional-activity, a synergetic and others. In modern conditions the pedagogical science more often uses a system-based approach, which is derived from the study of objects as systems, the consideration of objects as systems that determine the integrity of the object, its internal organization and functioning (Slastenin, 2004; Subetto, 2000; Yudin, 1978).

The educational organization management system from the perspective of the project approach is defined by a set of targeted management programs and projects that contribute to the fullest satisfaction of the set of goals, requirements, standards, regulations, and consumer demands (Osorgin & Chernova, 2003).

The situational approach, implemented in reality by the majority of domestic educational institutions, does not include the necessary conditions for the strategic planning, development and operation, realizing just a response to the current challenges.

It was found that the activity of an organization (enterprise) is subject to objectively existing factors, first of all, the processes resulting in creating a product. The ideology of the process approach is the basis of quality systems used in a vocational educational organization, as well. Using a process approach in the quality system of a vocational educational institution is not a copy of economic coordinates “supply and demand”, education—is a mission, an attribute of culture, a tool for improving the society, the economic terminology of which is used to facilitate the understanding of the processes essence.

2.2 A Process Approach as a Basis of Managing an Educational Organization

A process approach can be considered as the main methodological approach in international standards ISO 9000 (Deming, 2011). Among the key provisions of these standards—there is the focus on the needs and customer satisfaction, as well as continuous improvement of the functioning effectiveness and the organization development. The process approach is one of the basic principles of Total quality management, forming the basis of a series of international standards ISO 9000: 2000 (National State Standard R ISO 9000-2008). This principle states that the desired result is achieved more efficiently if the various activities and related resources are managed as a process.

The concept of “process approach” has come to education from production, and it considers management activities as continuous performance of certain interconnected activities and general management functions complex. Of fundamental importance in the process approach is the availability of objective dependence of the “output” result on the condition of “input” with mandatory presence of the controlled process characteristics.

The process approach in education is oriented to regulate the educational process on the basis of assessing its condition according to specially defined quality criteria for all the components of the process itself, as well as the factors that influence the final result.

2.3 Development of the Quality Management System of an Educational Organization

Methodology of the quality management system (QMS), which supports educational activities, should be based on the principles of coordination of interests of the state, the trainees (an individual), employers, and educational organization. Being inherently a dynamic system, QMS must have the properties of adaptiveness (self-training) at all hierarchical levels of management, in which regularly and effectively the processes of targeted adaptation to changes occur in the external and internal environment conditions. That means that the main issue on development and creation of QMS in modern conditions of the educational reform—is the compliance of its parametric, structural and target flows with the adaptation tasks, which corresponds to the principle of “continuous improvement”, regulated in the standards of quality.

Under the management of educational activities we understand the totality of successive, defined and continuous actions to ensure maximum efficiency of the predetermined goals of education. By analogy with the product life cycle, a trainee’s life cycle stages of the education level being formed (competencies, knowledge and skills) in an educational organization are the acquisition, storage, adaptation, distribution, generation and commercialization of knowledge. Introducing a managerial, somewhat averaged approach to education, with all its disadvantages, is inevitable, if as a result of the education process we want to get an in-demand in the labor market specialist-professional with a specific set of competencies, and the formation of such specialists is conducted under the conditions of large-scale education.

Currently there is no theoretically substantiated and practically used QMS generation methodology of an educational organization with the concept of Total quality management (TQM) and the standard ISO, the development of which is the formation of a stable management system aimed at long-term benefit on the basis of the quality of educational activities and available resources.

Factors influencing the formation of a management system based on TQM, the study on the relationship of general management and quality management determine the need for integrating the strategic basis in the principles of the total quality management concept. The method of quality management according to ISO 9000 has a market focus on ensuring the competitiveness of both the organization itself, as well as its products or services in the market due to the organization of quality systems and ensuring the appropriate quality assurance. The standard requirements include continual improvement and prevention of non-conformities; they are also focused on demonstrating the implementing organization’s capabilities to ensure the quality of products or activities to meet customer requirements.

Multivariate approaches to managing and implementing the educational process in compliance with the requirements of QMS in modern conditions causes a diversity of management methods, as well. Based on the objective (outcome), under direct and reverse connection, its components and interaction are formed. Searching for ways of optimal managing the educational activities must be based on a methodological approach that provides the basis of management and serves as a starting point. The approach peculiarities cause priority of particular components, as well as performance criteria of the educational process for the original purpose. Choosing an approach to the management of educational activities includes a description of the typical components of educational activities, and their properties, functional interaction, technology to produce a result, and it is due to the criteria priority of management efficiency.

3. Results

3.1 Algorithm for Processes Documentation of an Educational Organization

Carrying out the specifications development of each of the processes at any level of the hierarchy documentation of its information must be provided, containing all the necessary attributes of the process: the ins and outs of the process, the goals of the process, measurement and analysis of the process, the methods (arrangement) of possible improvement, ways of process interaction (suppliers/customers) and process resources.

In addition to the standardized specifications, the following presence appears as necessary:

- Pattern of interaction (interrelation) of processes, demonstrating their hierarchy and the principle of implementation (parallel or serial);
- Documented description of each process indicators and their target values, as well as assessment methods and ways to analyze the indicators;
- Description of arrangements to improve the process—an operative document, developed on the basis of analysis of the indicator values.

These documents provide the documentation of the educational activities processes.

Thus, the identification procedure for the processes of educational activity can be described by the following sequence of steps:

- 1) Definition of the processes, which are necessary and sufficient to control the quality of educational activities;
- 2) Definition of the objective of each process, and the goal is to have a specific measurable result;
- 3) Establishment of a processes system—the hierarchy, the relationship, the balance of inputs and outputs of processes;
- 4) The definition of “owner” of the process—the person responsible for its performance;
- 5) Description of the process output based on the established efficiency and requirements of the process “clients”;
- 6) Identification of “vendors” of the process and the establishment of the requirements threshold to the process input;
- 7) Description of the necessary process resources, both internal and supplied to the input;
- 8) Determining the way to implement the process (process technology);
- 9) Developing a system of measurement and analysis (monitoring) of processes;
- 10) Description of the processes according to their hierarchy and connection;
- 11) Development of information support for educational activities processes and processes documentation system.

3.2 Identification of Processes of an Educational Organization

Let us distinguish the basic processes of educational activities in an educational organization and carry out their specifications:

- *Academic support (the process target is designing, development and use of training and educational materials and documentation that meet the requirements of the content of higher and vocational education);*
- *Education (the process target: implementation of a set of educational programs);*
- *Professional training (the process target: implementation of training, retraining and advanced training of teachers to meet the modern requirements of the educational system);*
- *Research and innovation (the process target: the development of innovative projects, technologies and tools);*
- *Training prospective university students (the process target: to provide diagnostics, training, career guidance and adaptation of applicants);*
- *Marketing in an educational organization (the process target: assessment of the educational services market and the labor market conditions);*
- *General management in an educational organization (the process target: organization and normalization of administrative activity (psychological and pedagogical, administratively-distributive, and business functions) in an educational organization; formation of strategic development and strategic activity planning, and others.);*
- *Monitoring of educational activities in educational institutions (the process target: implementation of measurement, analysis and improvement of educational activities processes; the sub-processes target is to implement measurement, analysis and improvement of all selected processes of educational activities in an educational organization).*

3.3 Interaction Network of Educational Organization Processes

In addition to the basic processes description, it is necessary to develop their interaction diagram. The diagram proposed by the author (Figure 1) is based on the implementation of the Deming cycle

(plan-do-check-act—PDCA), and each discrete process is also developed as part of this cycle. The test results are included in the overall monitoring system—that is, in the implementation of the process of “measurement, analysis and improvement”, on the basis of which a management decision is elaborated and the next cycle is activated.

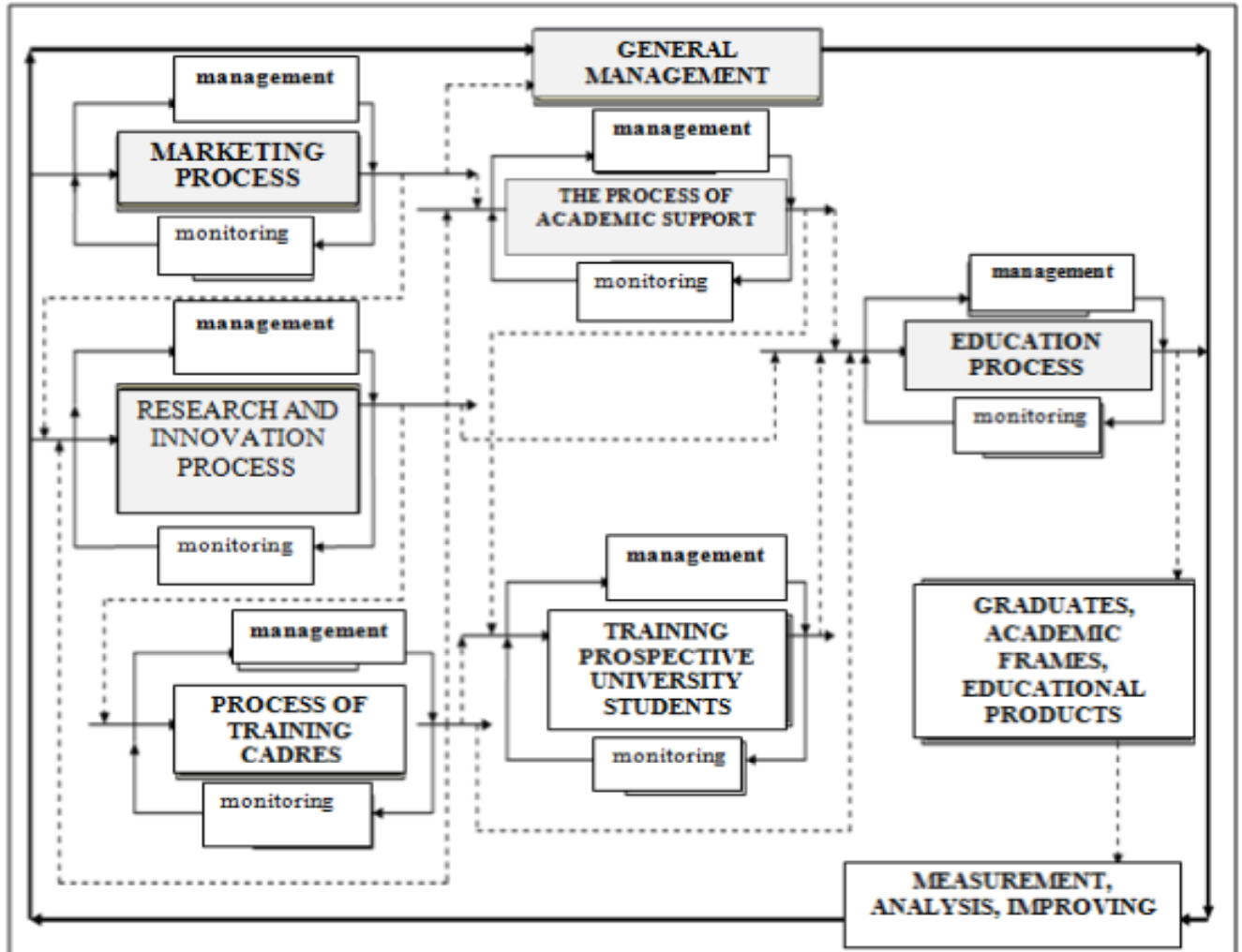


Figure 1. An interaction network of processes in an educational organization

The main quality of each process is its repeatability and stability of the output characteristics with given input parameters and available resources. Efficient management of all the processes will provide a product at the output of each of the process, meeting the consumer’s required level of quality and value.

For the formation and effective functioning of the management system of a higher professional institution its time parameters should be defined. Educational, methodical, scientific, controlling activities as core processes of an educational organization have considerable inertia, that is, they have gradual parameters change, being defined by qualitative and quantitative growth of its components, as well as by the emergent properties—which are the system-specific as a whole.

3.4 Concepts of Management Strategy

On the basis of the selected processes in educational activities the following bases of management strategy formation can be distinguished:

- 1) Determining a list of the main directions for the processes implementation, for their results;
- 2) Conducting a comprehensive analysis of the achieved quality level in the implementation of the basic

processes;

- 3) Predicting the trends in the labor market and in the competitive environment;
- 4) Implementing forecasting activities in the sphere of realizing the basic processes, taking into account the environmental variables of an educational organization;
- 5) Coordination of analytical forecasts for developing external and internal environment of an educational organization and determination of the target values of the basic processes on this basis;
- 6) Development of educational research, productive, organizational and in-house ways to achieve the target goals—educational organization processes improvement.
- 7) Performing the calculations and estimates of the necessary and disposed resources provision, its adequacy for realizing key processes.
- 8) Implementation of monitoring the educational activities processes in an educational organization.

4. Discussions

Educational organizations are considered as part of the educational system in which there is a transfer of knowledge, scientific and cultural potential for future professionals, that is, they more or less satisfy the needs of individuals, society and the labor market. Questions and problems on quality assurance of educational services, training graduates being in line with modern requirements and having the necessary expertise are a priority in the integration of realms of science, education and production. The quality of the training actions to a certain extent depends on the level of educational programs, qualifications, competence of teachers; ideally, an educational organization must continually improve the quality of educational activities, as well as material and technical, research, information-methodological support and teacher potential. Studies on the problems of assessing the quality and aspects, and integration processes of Russian education models, are well represented in educational inquiries, however, there is a need to explore complex issues of quality management, to implement its strategic planning.

5. Conclusions

Development of process models and management mechanisms for educational activities allows continuous improving the process of training learners to achieve their current level of knowledge and competencies formation by ensuring the quality of the educational process itself, as well as more efficient using the available personnel, material-technical, informational and financial capacity of the educational organization. In view of the highly competitive market of educational services, customer orientation and potential needs of the labor market will provide the necessary competitive advantages of higher and vocational education organizations. Due to the description of the educational activity processes, the definition of efficiency and effectiveness indicators of its processes, the process owners and the management structures of educational organizations get an integrated technology for implementing and monitoring all the activities of the educational process.

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