

предприятия, поскольку объединяет две оценки – социальную и экономическую, сводит их в единый интегральный показатель. Это обеспечивает комплексный подход к социально-экономической оценке потенциала предприятия, формирует базу для принятия управленческих решений, помогает обоснованно распределять ресурсы. Практическая реализация методики позволит влиять на текущее состояние и тенденции развития предприятия, составлять прогнозы,

планы развития и использования потенциала предприятия.

**Ключевые слова:** потенциал предприятия, управление потенциалом предприятия, интегральная оценка потенциала предприятия

*Рекомендовано до публікації докт. екон. наук Б.М. Андрушківим. Дата надходження рукопису 18.11.14.*

УДК 371.7

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## QUALITY MANAGEMENT OF EDUCATIONAL INSTITUTIONS IN PROTECTING STUDENTS' HEALTH: CONCEPTUAL AND STRUCTURAL-FUNCTIONAL INNOVATIONS

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## УПРАВЛІННЯ ЯКІСТЮ ЗДОРОВ'ЯЗБЕРІГАЮЧОЇ ДІЯЛЬНОСТІ ОСВІТНІХ ОРГАНІЗАЦІЙ: КОНЦЕПТУАЛЬНІ ТА СТРУКТУРНО-ФУНКЦІОНАЛЬНІ ІННОВАЦІЇ

**Purpose.** The research aims to support quality assurance concepts of educational institutions in protecting the health of students and in developing of a strategic framework for its management, based on the provisions of the ISO standards.

**Methodology.** The authors used theoretical methods such as historical and logical, comparative, analytical methods, systems analysis, modeling and forecasting. Empirical methods included the study and generalization of pedagogical experience.

**Findings.** Conceptual provisions of quality assurance of the work of educational institutions for the protection of students' health are developed, presented in the form of objectives and management principles. The implementation of the selected quality management principles in the study of students' health necessitates the allocation of internal reserves of educational organizations for the creation of the health services department. The health service provides for the implementation of the key actions aimed at the promotion of students' health and includes in its structure a number of specialized units (medical, sanitary, hygienic; valeological, pedagogical; sports and recreation; psychological and pedagogical; monitoring). The work of the units is focused on the appropriate course of actions, their specificity in the description that most closely represents all aspects of students' health the interdepartmental social partnership. The head of the service and each of its staff members has appropriate powers and responsibilities. Despite the shared aims of the units' functions (diagnostic, prognostic; informational, advisory; scientific coordination), the spheres of competence of various specialists involved in health protection activities are separated within the service, while maintaining the common strategic direction.

**Originality.** The concept of "the quality of the work of educational institutions for students' health protection" is clarified. It is understood as the organization's ability to perform at the required level of its responsibility for the preservation and promotion of the health of students. The concepts of quality assurance of activities of educational institutions aimed at students' health protection are developed along with the strategic guidance on the management of quality. A structural and functional health service model is proposed. The research provides methodological and conceptual foundations for the development of quality management of educational institutions in their work aimed at students' health protection to solve important methodological, theoretical and practical problems.

**Practical value.** The results of the research can be used in the educational practice to ensure the quality of work of educational institutions aimed at the protection of students' health.

**Keywords:** *the quality of work of educational institutions in students' health protection, ISO standards, quality management, principles of quality management of educational institutions working for students' health protection, structural-functional model of the health service*

**Statement of the problem and analysis of the latest achievements.** Along with the modern requirements regard-

ing the improvement of the quality of education (these requirements are laid out in most legal documents of the Ministry of Education and Science of the Russian Federation), one of the most important requirements for educational in-

stitutions is to provide the quality of activities ensuring students' health. This requirement is caused by the steady downward trend in the level of children's health during the period of their studies. By quality we understand the degree of correspondence of a set of inherent characteristics with specified requirements [1], thus considering the quality of activities of educational institutions in protecting students' health as the degree of the ability of an institution to fulfill the function of preservation and promotion of students' health at the required level. The quality in question finds its reflection in a set of parameters such as, first, achievements in the personal development of students, associated with the formation of their preparedness for health protection activities (subjective state of an individual, meaning the desire and ability to work for the preservation and promotion of health); second, the volume, structure and completeness of the use of the institution's personnel, material, technical, scientific, methodological and other internal resources required in the protection of health; third, the dynamics of the processes of the activity development (target-oriented, normative, criteria-based, organizational, content-related, motivational); fourth, the level of perfection of approaches and technologies used to improve the quality of health protection activity and its results. Accordingly, to ensure the quality of work of educational institutions in the protection of the health of students is to create conditions conducive to the effective implementation of the preservation and promotion of students' health in the framework of the existing educational process and the resource capacity of the institution.

Despite the seeming simplicity and obvious definiteness of the approach to the problem of achieving the quality of work of educational institutions for the protection of the health of students, the ways to resolve it are not disclosed enough yet.

First, according to the challenges of the present time, we are talking about improving the conceptual basis of the assurance of quality of the work of educational institutions for the protection of students' health, which will allow to foresee and plan the development of this work, to ensure its effectiveness and efficiency.

Second, taking into account that the education system today is increasingly seen as services (specific services, related to the formation of human personality) satisfying the educational needs of the population, the approaches to the assurance of quality of the work for the protection of students' health (as a kind of educational services) shall comply with international practice, which is reflected in the standards of the International Organization for Standardization (ISO). It should be noted that, in spite of the existing research on the application of these standards in the national school of management of quality in general and vocational education (Panasyuk V.P., Potashnik M.M., Selezneva N.A., Subetto A.I., Fedorov V.A. and others), in the theory and practice of educational institutions dealing with the protection of students' health in Russia this experience is not disseminated enough. Formal application of international standards to ensuring the quality of activities for the protection of students' health, that is, without the proper interpretation of the provisions and requirements in relation to the conditions of educational institutions, will not be effective, because the standards describe

only the elements of the quality management system, without mentioning how a specific institution should use them.

Third, it is necessary to focus considerable attention on the peculiarities of the organization of work for students' health protection. It should be taken into account that the issues are considered by many modern scholars (N.A. Golikov, V.N. Irkhin, E.M. Kazin, V.V. Kolbanov, V.R. Kuchma and others), their versatility, depth and reliable effectiveness imply their widespread use in the practice of educational institutions in the protection of students' health. However, the latter is difficult due to the lack of resources of institutions and the failure to rationally distribute the available ones. From our point of view, it is possible to overcome this difficulty, if management is applied as a means, widely introduced in education practice. The theory of education quality management requires an organized system of management of the work of educational institutions for the protection of students' health at each institution, taking into account its resource conditions and the capabilities of the teaching staff.

Thus, today there is an objective need for creating of conceptual provisions to ensure the quality of work of educational institutions for the protection of students' health, that is, the transition of the activities in the changing social, economic and educational environment to a new level with the aim of maximum satisfaction of the requirements of an individual and society. At the same time the essence of students' health protection activities as a process of natural transition to a more perfect state, is in creating an integrated system of the activities in educational institutions by developing the existing basis and by implementing the principles of ISO with the preservation of all the accumulated positive experience, as well as the established theory and empiricism of this kind of educational activity.

**Statement of the main findings.** Today quality management is based on the idea that the work in this direction cannot be effective after the products are produced (or educational services are provided, as in our case), and should be implemented in the process of production (provision of educational services). It is also important to ensure the quality of the activities preceding the process of production. Quality is determined by the influence of many random, local and subjective factors, and the corresponding management system is required in order to prevent their effect. What is needed is not some occasional efforts, but a set of measures of permanent impact on the process of creating a quality product or providing a service.

The main purpose of the quality management system in educational institutions is a constant systemic user orientation, the improvement of the institution's work under the leadership of the management while involving all the participants of the basic processes into the domain of quality [1, 4, 6, etc.]. By specifying the target (a system-forming factor of the quality system) it is possible to avoid ambiguity. In particular, stating that the purpose of the system of quality management of work for the protection of health of students (as a subsystem of the quality of education in educational institutions) is the creation of the necessary conditions for the formation of students' readiness for health protection activities, we aim the quality management system at the trans-

formation of education into the process of personality development and define its specific forms of organization, conditions and means that ensure this development within the framework of health protection activities. Accordingly, we have re-considered the principles of the ISO international standards from the standpoint of quality assurance of students' health protection at educational institutions [4].

*User orientation.* Students and their parents, as well as the education system and all the society as represented by the state are the consumers of students' health protection activities and, in general, of educational activities. Educational institutions should provide consumers with comprehensive information about this kind of activity, so that they are sure that the educational institution can provide the required quality in regard to the preservation and promotion of students' health and constantly maintain its level.

*Managers' leadership.* The process of ensuring the quality of any activity, including students' health protection, starts with the top management, develops while the leaders show interest in it and stops when the managers become disinterested. In accordance with the ideas of pedagogy of cooperation, creativity and self-actualization let us determine the transformation of a manager into a leader. The proposed approach allows us to free up resources at the expense of many of the unclaimed functions of the manager when instead of administration and control functions a leader acts as a counselor and assistant who welcomes and encourages the initiative.

*Involvement of staff.* The effectiveness of the management of quality of students' health protection activities is largely determined by the level of corporate culture of the organization and depends on the involvement of its staff into the activities. Accordingly, each of the activity participants becomes a member of the team, in which his specific contribution is determined, while personal objectives are not in conflict with the goals of the health protection of students.

*Process approach.* Supporting the idea of process thinking in assuring the quality of students' health protection activities, in accordance with the concept of mega process, the implementation of the following steps should be ensured: 1) to identify the system of processes necessary for the management of quality of students' health protection activities; 2) to determine the sequence, interaction and interrelation of the identified processes in the system; 3) to identify the key processes (from the standpoint of the goal of students' health protection); 4) to give appropriate authority to the employees responsible for each process in the activity concerning students' health protection; 5) to identify the customer of the process of students' health protection activities and describe the output, i.e. the quality requirements for the results of this process; 6) to identify the suppliers of the process of students' health protection activities and determine the requirements to the elements of its input; 7) to indicate the criteria for the effective management of the process of students' health protection activities and select metrological measuring instruments for them; 8) to plan processes aimed at changing the indicators of quality of the process of students' health protection activities; 9) to describe the process of students' health protection activities in a flow diagram; 10) to determine input and output documents on the stages of the pro-

cess of students' health protection activities; 11) to ensure the flow of information needed for the effective management of students' health protection activities; 12) to introduce monitoring of the data of the process of students' health protection activities; 13) to implement corrective and preventive actions systematically to achieve the objectives of the process of students' health protection activities; 14) to establish the procedure for introducing changes in the process of students' health protection activities. This mega process allows for a systematic approach to the disclosure and description of all the processes that form the basis of the work of educational institutions for the protection of the health of students.

*System approach to management.* The application of a systematic approach to the management of students' health protection activity involves coordinating all aspects of the activity, the correlation of particular tasks with the overall objective. Controlling the quality of activities protecting the health of students targeted at the formation of readiness of students for activities for the promotion of their health, will obviously lead to the corresponding changes in the objectives, content, forms and methods of the entire educational process. These transformations do not imply particular technical and tactical solutions, they imply the transformation of the whole educational process in terms of health protection. The focus should shift from the solution of techno-logical problems to the problems of systematization of the management of students' health protection. Therefore the most important link in the quality control is the systematization of its components on the basis of the quality objectives, which makes it possible to bring together the efforts of the staff of the educational institution in achieving the goal of preserving and promoting the health of students.

*Continuous improvement.* Continuous improvement starts from a person, the improvement of his knowledge, skills, competence and abilities in matters of health protection and promotion, which should be the aim of the improvement of the work of educational institutions for the protection of the health of students.

*Decision-making based on facts.* Educational activities are associated with the production of the enormous number of data, respectively, there is a problem of combining these data to obtain information allowing to analyze the facts relevant to decision-making. Therefore, the degree of elaboration of documents regulating the quality of management of students' health protection activities will be important. On the basis of the facts that have undergone the documentary processing it is possible to create a data base that promotes turning the information into knowledge, and reducing the costs caused by inefficient managerial decisions.

*Mutually beneficial relations with suppliers.* Suppliers of educational institutions are the applicants, prospective students and their parents. Today they have the right to make their own choice of the educational institution which will provide them with educational services. At the same time it is not always possible for educational institutions to select the most deserving individuals from among those wishing to learn, and in our case, from among the most healthy. It is known that the processing of low-quality raw materials will lead to the deterioration of consumption ratios, to the increase of the number of inconsistencies and to the

worsened implementation of the technological regulation. In the industrial sector this leads to the suspension of production, delay and increased costs of services and products. In the educational process the low level of students' health leads to the decline of their general educational level. Taking into account the importance of the role of both the students and their parents in the development of the personal attitude to health preservation, it is important to include these subjects of the educational process in students' health protection activities.

Thus, the management of quality of students' health protection activities is an essential condition and a major technological link in achieving the goal of students' health protection. Besides, it is not a question of particular decisions, but of the restructuring of the whole process of work of educational institutions for students' health protection in accordance with the system and process approaches.

In this regard, the tasks of ensuring the quality of work of educational institutions for students' health protection are as follows:

- adjustment of objectives of students' health protection activities: the shift from the students' acquisition of knowledge and skills in solving problems of health protection and promotion to the development of personal qualities, allowing to solve the problems of health protection effectively, based on the acquired knowledge and skills;

- consolidation of teaching as a process constructed normatively (which, therefore, is strictly regulated) with learning as students' individual work, correction of these activities and their educational support predetermining the need to create conditions for the personal development of students and improvement of their abilities related with health protection;

- substantiation of the advantages of the subject-subject management of quality of students' health protection activities, aimed at establishing an atmosphere of creativity, the disclosure of a better correlation between the leader and employees in quality aspects, the desire for self-improvement and self-development, the growth of corporate culture, the involvement of staff of the educational organization in the solution of problems in assuring the quality of students' health protection activities;

- development of principles for the systematization of management of quality of students' health protection activities on the basis of formation of students' readiness for health preservation for the substantiation of systemic changes in all the sub-systems (organizational, pedagogical, technological, etc.) of management of quality of work of educational institutions for the protection of the health of students.

Proceeding from the rethinking of the goals and objectives, we have identified the principles of management of quality of work of educational institutions for the protection of the health of students, reflecting the essence of the basic principles of the ISO standards [4].

1. *Correlation between the interests of educational institutions and their customers in issues of students' health protection.* The consumers state their requirements as to the performance of educational institutions concerning the preservation and promotion of students' health, including the level of their preparedness for health protection activities. Educati-

onal institutions should understand the current and future needs of the customers, meet their requirements and try to exceed their expectations. The level of customer satisfaction should be measured and evaluated, respectively, the management of quality of students' health protection activities should have a mechanism for working out corrective actions. Therefore, the study of the needs and expectations of consumers should be dealt with separately in students' health protection activities.

2. *Correlation between undivided authority and creative initiatives.* It is the head of the educational institution who is responsible for the creation of an environment, in which the employees of the institution are fully involved in the students' health protection activities. Accordingly, it is important for the head of the institution to demonstrate by personal example the commitment to the quality of students' health protection activities, creating an atmosphere of trust, initiative, recognition and reward of the employees' contribution.

3. *Correlation between the goals of the educational institution and the goals of the employees.* The success of the management of quality of students' health protection activities depends on the involvement of all the staff of the institution in the implementation of such activities. Every employee of the educational institution should become a member of the team, in which his or her individual contribution will be determined, since the effectiveness of innovation depends largely on the level of the corporate culture. Quality management should encourage the employees to show initiative in trying to improve the quality of students' health protection activities, to take responsibility for solving quality-related problems, to improve their professional skills, to share experience with their colleagues.

4. *Correlation between the goals of educational institutions and the goals of students.* Being an atypical "raw product" students should play an active role in improving the quality of work of educational institutions for the protection of students' health, they should "make themselves" in the intellectual and material conditions created by the management of the institution and the teaching staff. In this regard, it is important to create an appropriate educational environment activating students' self-awareness. The expansion of the students' conscious learning and cognitive activity should be conditioned by their apprehending the goal – preparedness for their health preservation activities.

5. *Correlation of the orientation of students' health protection activities toward the process and the result.* Since any activity that is under the impact at the input and is converted into results at the output, can be seen as a process, therefore, in the management of quality of students' health protection activities it is important to consider each element of any process of these activities as both a process and a system with its customers and suppliers, their inputs and outputs.

6. *Correlation of approaches to the management of quality of students' health protection activities.* The process and system approaches are closely related in the management of quality of students' health protection activities. Therefore, it is important to consider every process in students' health protection as a system of interrelated processes. In this system it is necessary to clearly define and measure the inputs and outputs (results) of the process; to identify the suppliers

and customers of each process, to identify their needs, study their satisfaction with the results of the process; to ascertain the interaction of processes with each other; to establish the authority, rights and responsibility for the management of the process; to determine resource provision of the process in the time of its projection. The system approach assumes continuous improvement of the processes of students' health protection activities through their measurement and evaluation. Innovations based on the system principle should not be limited only by improving the technological component of the system of students' health protection activities existing in the educational institution but should be introduced as elements of the new system. Due to that there is a transition from particular solutions to the restructuring and modernization of the entire process of students' health protection activities, where every technological issue corresponds with the goal of the management of quality of these activities. Technological innovations are correlated with the principles of the personality oriented approach which provides for solving problems of self-awareness and self-realization of each student in health protection activities.

7. *Correlation of approaches to monitoring the quality of students' health protection activities.* Monitoring the quality of students' health protection activities should include elements of the main approaches to assessing the quality of these activities: reputational (expert-based) approach associated with the assessment of the internal characteristics of the activity; result (external) approach, based on the measurement of outcomes; general approach based on the continuous improvement of the quality of students' health protection activities. Accordingly, it is important to systemize the elements of internal and external evaluation.

8. *Correlation between the documentary maintenance and the management of quality of students' health protection activities.* The effectiveness of the management of quality of students' health protection activities is largely determined by the degree of elaboration of the documents regulating it. The creation of the document management system will make it possible to track the basic conditions for implementing a systematic approach to the management of quality of these activities, including the feedback on the implementation of innovations. When documenting the processes of students' health protection activities it is necessary to rank them according to the degree of their influence on the achievement of the objectives of these activities and according to their specific functions. Special attention should be paid to the requirements and the results of each process, its inputs and outputs.

In our opinion the observance of the indicated principles will ensure the emergence of new relations between the elements of the work of educational institutions for students' health protection and will integrate them into the system. This will lead to the emergence of the new system properties, different from the old system to the proposed correlation of the elements, that is, it will lead to the emergence of a new quality in the management of students' health protection activities.

Thus, ensuring the quality of the work of educational institutions for students' health protection requires quality management, based on the provisions of the theory of edu-

cation quality management and the ISO standards. The goal and the basic principles of the management of quality of students' health protection activities formulated in the research determine the modernization of the structure of educational institutions – setting up of a structural unit at the expense of the internal resources. Experience shows that such unit is a health service (Kazin E.M., Kim S.V., Kolbanov V.V., Shkola E.O. and others). However, the adaptation of these units is difficult as their activities differ in the goals, objectives, activity areas, participants, which is due largely to the unresolved issues of their setting up directly in the educational institutions. It should be noted that the question remains open as to ensuring interdepartmental cooperation of specialists involved in students' health protection activities, that the level of their interaction is low. The existence of such a structural unit makes it possible to overcome this discrepancy. The need for creating an organizational structure always arises when it is required to ensure the consistency in the work of a group of people and the rational regulation of their activities aimed at achieving the goal. Health service functions as a model of this organizational structure within the framework of students' health protection activities.

In the scientific literature the model is seen as an artificially created one in the form of charts, tables, drawings and so on, an object which being similar to the object under study shows and reproduces in a simpler, smaller form the structure, properties, interconnections and relationships between its elements [2]. In the process of the scientific cognition the model replaces the original: the study of the model gives information about the original. From the viewpoint of the character of reproducible connections under study different types of models can be distinguished: structural, functional, mixed models. Thus, the structural model is the result of a systemic approach to the modeling of objects and phenomena. The peculiarity of structural models is that they are less tied to the object than other types of models. The functional model imitates the behavior (function) of the original. At the same time functions are one of the essential characteristics of the system that are represented by the given model. The mixed model combines the features of the other two models.

In the construction of the health service the structural and functional model is used which is based on the block and target structures formed in a matrix type of management [7]. This model allows us to consider in detail the components and functions of the system, to show the interconnections of its structures. The study of the basic notions and provisions of the management concept made it possible to identify the main requirements for the organization of the health service as a separate structural element in the educational institution. It is established that the notion "organization" has several meanings: 1) internal order, consistency of interaction of more or less differentiated and autonomous parts of a whole, conditioned by its structure; 2) a set of processes or actions leading to the formation and improvement of relationships between parts of a whole; 3) union of people jointly implementing the program or purpose and acting on the basis of certain rules and procedures. In the literature on the general aspects of management the term "organization" is used, as a rule, in two senses. First, it is a kind of property, consisting in

the rational combination and ordering of all the elements of a specific object [3]. In this sense, the organization may be regarded as a process of human interaction for achieving the goal [5].

In the literature on the general aspects of management the term “organization” is used, as a rule, in two senses. First, as a kind of property, consisting in the rational combination and ordering of all the elements of a specific object [3]. In this sense, the organization may be regarded as a process of human interaction for achieving the goal [5]. Second, the organization is interpreted as the object itself, which has a structure ordered in a certain way [3]. In this case, it is nothing else than a kind of community (association) of people who need to work together to achieve what none of them could achieve alone. Thus, the organization as a property and a process is the content and the organization as an object and a community is nothing else but the form for the content. To solve difficult problems related to the preservation and promotion of students’ health, in accordance with the principle of the management of quality of students’ health protection activities “Correlation between the goals of the educational institution and the goals of the employees” it is necessary to involve the entire teaching staff in this work and to regulate it rationally. It is clear that the optimal variant of the regulated activity will be much more effective if it is implemented within a certain community. We considered the community (the health service) is as an organization with all its features.

All forms of the organization are characterized by the following: 1) the presence of at least two people who consider themselves part of the group; 2) the presence of at least one goal, aimed at meeting the needs or interests of a person or a society that is accepted as a general one by the members of the group; 3) the presence of team members who intentionally work together to achieve the goal which is meaningful for all; 4) the presence of a combination of functional positions and roles; 5) formalization of a significant part of the objectives and relationships; 6) production of a surplus product in various forms [3, 5, 7].

As in the modelling of any organization, when creating the health service (as a relatively independent structural unit in an educational institution) one should adhere to the following interrelated principles: 1) the division of labor or specialization; 2) structuring; 3) taking into account the functional operations (processes) [5].

Thus, the effective operation of an organization cannot be achieved if all its employees duplicate each other’s work, or if one employee fulfils all the work that an organization does. Therefore, in any social organization there is a division of labor among its members and subsystems – specialization.

The division of labor takes place in two directions: horizontal - stepwise distribution of work - and vertical - the division of work on the levels of the hierarchy (implementation and administrative work). Within these methods, there is specialization of functions. The need for specialization is conditioned, on the one hand, by the specific skills that people have, and on the other – by the complexity of the work processes. The more complex the tasks are, the more requirements to the implemented activities impose on employees, and therefore the more urgent becomes the need for specialization of labor.

In accordance with the principle of division of labor, taking into account the specifics of students’ health protection activities for the health service, in our opinion, it is necessary to identify five main areas of activity (specializations) [4]:

1) medical and sanitary-hygienic support related to providing proper sanitary and hygienic conditions of the educational process along with the medical support of students (as well as other subjects of the educational process), implementing the work on diagnostics of the health, followed by the analysis and development of appropriate recommendations, the adoption of preventive measures;

2) the formation of health-oriented personal position of the subjects of the educational process with the help of pedagogical means which necessitates the theoretical and methodological development of the substantiation, determination and effective use of educational technologies, methods and means of formation of students’ preparedness activities for health protection activities;

3) sport and health support is determined by the special significance of physical training and the development of conditioned physical characteristics, creating the potential of physical health; this area of activity requires the appropriate theoretical and methodological development of the substantiation, determination and effective application of the sport and health technologies, methods and means in the educational process;

4) psycho-educational support associated with the need to support students by introducing developing and correctional systematic and individual oriented programs;

5) monitoring the level of physical development and health of students, which is determined by the need of gathering, fast processing, systematization and storage of information on the health status of students in order to identify risk factors and to timely implement corrective and preventive actions, which requires the development of the content and management plan of the monitoring.

The identified areas of activity should be considered as the basic (key) processes in the quality management system of educational institutions working for the protection of students’ health, which ensures the implementation of the “process approach” principle of the ISO standards [1].

Specialized labor in comparison with non-specialized labor has a number of advantages: it makes it possible to understand the nature of the matter in detail, to identify the problems faster and better, which contributes to finding ways to improve the work of the employee; it simplifies the communication system: a narrowly specialized worker does not need frequent contacts with colleagues and management; specialization can improve the quality of fulfilment of professional tasks, can make labor more efficient. At the same time, specialization of labor leads to the complication of the problem of coordination of individual professionals and creates problems in managing the organization as a whole. To solve them, as well as to enhance manageability it is advised to introduce departmentalization – grouping of activities and creation of structural units [3]. Taking into account the areas of activities related to students’ health protection in the health service as a relatively independent structural organization, it is appropriate to single out the structural units (the structuring principle), for which certain authorities and responsibilities

should be determined: 1) medical, sanitary and hygienic; 2) valeological and pedagogical; 3) sport and health; 4) psycho-pedagogical; 5) monitoring.

The structure of the management system of the organization should reflect who is subordinate to whom, who is connected with whom directly or indirectly. Hence, the increase in the importance of the functions of individual subjects and their responsibilities, rights. The organizational structure is usually depicted as a diagram, called an organigram that indicates the subjects and relations between them: who is subordinate to whom (relations of coordination). It is a kind of a skeleton of the management system.

There are several types of organizational structures of the management systems: linear, functional, linear-functional, project and matrix structures [3, 5, 7].

The traditional structures of school management are linear-functional structures. They are characterized by the presence of two or more hierarchical levels of management, at each of which a group of employees is subordinate to the head, and the relationships between the heads and the subordinates are based on the principle of undivided authority. The work of an educational institution is organized by the head who delegates to his deputies the right to supervise the work of subordinate employees. Commands are given over from the head of the organization to his deputies, and from them to the employees along the chain (chain of command). In the structures of this type, along with the hierarchy of the line management, there are functional divisions (teachers' council, methodological associations and others possessing functional authority), specializing in the implementation of certain administrative actions and making decisions concerning a limited range of specific issues.

Due to the specialization linear-functional structures make it possible to solve certain problems in a more qualitative way and to make fewer demands on the versatility of training of the heads and the subordinate employees, which is their undoubted advantage. However, in unstable external conditions or when there is a need to deal with a lot of non-standard tasks that require collaboration of different departments, these structures are ineffective because they lack flexibility. Besides, functional differentiation leads to the loss of the common goals of the entire system, which are out of view of its structural units. Each unit can see only part of the work, and only the head of the organization is the bearer of the common goals.

In this situation, the structures of the project and matrix types are more flexible. The project structure is a temporary structure created to address some major challenges, for which a group of employees who can cope with this task are gathered in one team together with external experts. When many projects are implemented simultaneously there emerges a matrix-type structure, where one and the same person joins various project teams and is subordinate to a number of project managers at the same time. But these managers do not have the administrative authority which belongs to the heads of departments. Project managers determine only "what" and "when" is to be done. "By whom" and "how" it will be done is determined by the heads of departments. The matrix structures make it possible to increase the management flexibility significantly, but at the same time they make

high demands on the competence of managers and on the level of maturity of the team.

When designing the organizational structure of the health service it should be decided whether the responsibility for implementing the activities is distributed between the departments and the coordination is carried out vertically or task forces will be created with the responsibility for the implementation of complete projects. In the first case it is a matter of the distribution of new powers and responsibilities within the linear-functional structure, while in the second case it is matter of the creation of the project or matrix type structure.

The first variant is familiar, but it has some disadvantages typical of linear-functional structures (lack of close relationships between the structural units; quite uncertain responsibility as those who prepare a decision, as a rule, are not involved in its implementation; overly-developed system of interaction along the vertical line, namely, subordination in the hierarchy of management, that is a tendency to over-centralization). The second variant requires a well-functioning horizontal communication in the team of members of the health service and quite a high level of their development. In our case, the organizational structure of the service should be based on the mixed type, for example, the linear-functional structure with the elements of the matrix type. As the linear-functional structure will make it possible to solve certain tasks more efficiently and to make fewer demands on the versatility of training of the managers and the employees, which is its undoubted advantage, and the matrix structure will significantly enhance the management flexibility.

If systemic management transformations take place in the structural organization, individual and collective subjects developing and implementing these innovations emerge there. Since the role of coordination of interaction between all the subjects of the structure becomes more important, the subjects of the upper levels – the heads become overloaded. In this case, an important step is the transfer of authority in decision-making to the subjects of the lower levels of the organizational structure. Consequently, the health service should be headed by a person with the corresponding rights and responsibilities – the head of health service, or the organizer of students' health protection activities. In addition, each of its units must be headed by the most responsible, competent and active employees – heads of departments or those who are responsible for the basic processes of students' health protection activities in the educational institution.

The organizational structure is only a static model, which reflects, in the figurative expression of B.Z. Milner, the "anatomy" of the organization. The actions of the units and the individuals implementing these actions are the "physiology" determining the activities in solving the problems of the organization [3]. This raises the need to implement the next classical principle of designing the organization – the principle of functional operations, that is what the health service units and the individuals working in them should do (their functions) [5]. In accordance with this principle it is expedient to identify three main functions of the health service as a whole, and its departments:

1) diagnostic and prognostic – carrying out systemic diagnostic studies as a part of the basic processes / activities in students' health protection, identification of corrective and

preventive actions, contributing to the achievement of the expected results;

2) informational and advisory – generalization and systematization of factual material within a particular process / activities in the protection of students' health at the theoretical and empirical levels, informing the public about the results of ongoing activities, the provision of advice on the preservation and promotion of students' health;

3) research and coordination – coordination of efforts of experts of various levels and profiles in the development of constructive strategies and provision of scientific and methodological support for students' health protection activities.

In our opinion, the following indicators should be used as integrated management criteria of the effectiveness of the health service, in accordance with the theory of education management: 1) systemacy and regularity in the organization of work; 2) activity and productivity; 3) efficiency and accuracy of work.

Systemacy and regularity in the organization of the health service are characterized by clearly defined objectives, targets; by the clear distribution of functional duties; by the presence of well-developed criteria for evaluating the work of departments; by the systematic analysis of the efficiency of the taken and implemented decisions; by the regulated system of informing about the implemented actions and their effectiveness.

Activity and productivity of work are determined by the number of initiatives taken to improve the work of management and new activities in students' health protection coming from the structural units; by the number of new and implemented decisions; by the activities in the protection of the health of students, by the targeted and innovative projects, etc.

The efficiency and accuracy of the work are conditioned by the timely implementation of the planned (by the number of actions carried out optimally and efficiently, in correlation with the ongoing activities and with the "organizational errors") and coordination in the implementation of actions.

The content of the described activity areas integrates, in our opinion, all aspects of the work of educational institutions in the field of preservation and promotion of students' health with the possibility of ensuring interdepartmental social partnership.

In general, the creation of the health service makes it possible to design an efficient organization and to structure the activities of educational institutions aimed at the preservation and promotion of students' health. Moreover, the proposed structure of the health service allows separating the spheres of competence of specialists in various fields, without the assumption of disunity of their efforts in ensuring the common strategic goal – the formation of readiness of students for health protection activities.

**Conclusions.** The developed conceptual provisions of the quality assurance of activities of educational institutions aimed at the protection of students' health and the strategic guidelines for its management, based on the provisions of international standards for quality assurance of different activities enriched with the methodology of the process approach, allow of supplementing the pedagogical knowledge with the structural-organizational and content-functional

component of the process of work of educational institutions aimed at the protection of students' health, reveal the ways of improving its quality in the sphere of education.

The efficiency of the research is determined by the results of systemic transformations in the activities of a number of educational institutions of the Ural and Siberian regions of the Russian Federation aimed at protecting students' health, which ensured the achievement of the quality of this kind of educational activity.

The results of the research can be used in the educational practice of educational institutions of various types; in the system of further training and retraining of teachers and administrative staff of educational institutions; in the preparation of educational institutions for accreditation; in the development of curricula and programs of general and vocational education; in scientific research in the field of protection and promotion of the health of participants of the educational process.

*The work was financially supported by the Ministry of Education and Science of the Russian Federation in the framework of the project No. 2014/393 and by a grant from the Russian Foundation for Humanities and the Government of the Sverdlovsk region in the framework of the project No.14-16-66019.*

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**Мета.** Дослідження направлене на обґрунтування концептуальних положень забезпечення якості здоров'язберігаючої діяльності освітніх організацій і розробку стратегічних установок з його управління, заснованих на положеннях міжнародних стандартів ISO.

**Методика.** З числа теоретичних методів використаний історико-логічний, порівняльно-співставний, аналітичний методи, системний аналіз, моделювання, прогнозування. Емпіричні методи включали вивчення та узагальнення педагогічного досвіду.

**Результати.** Розроблені концептуальні положення забезпечення якості здоров'язберігаючої діяльності освітніх організацій, що розкривають його сутність і представлені у формі цілей і принципів управління. Встановлено, що реалізація виділених у дослідженні принципів управління якістю здоров'язберігаючої діяльності обумовлює необхідність виділення за рахунок внутрішніх резервів освітніх організацій структурного підрозділу – служби здоров'я, що забезпечує реалізацію основних напрямів здоров'язберігаючої діяльності й що включає до своєї структури ряд спеціалізованих підрозділів (медико-санітарно-гігієнічний, валеолого-педагогічний, фізкультурно-оздоровчий, психолого-педагогічний, моніторинговий). Робота підрозділів орієнтована на відповідному їх специфіці напрямі діяльності, в опісі яких найбільш повніше представлені всі аспекти здоров'язберігаючої діяльності освітніх організацій з урахуванням міжвідомчого соціального партнерства. На чолі служби та кожного з виділених підрозділів знаходяться їх керівники, наділені відповідними повноваженнями та відповідальністю. Не дивлячись на спільність виконуваних підрозділами функцій (діагностико-прогностична, інформаційно-консультативна й науково-координаційна), усередині служби, за збереження єдиного стратегічного напрямку діяльності, розведені сфери компетентності фахівців, задіяних у здоров'язбереженні.

**Наукова новизна.** Уточнене поняття „якість здоров'язберігаючої діяльності освітніх організацій“ як ступінь здатності організації виконувати на необхідному рівні свої функції зі збереження та зміцнення здоров'я тих, що навчаються. Визначені концептуальні положення забезпечення якості здоров'язберігаючої діяль-

ності освітніх організацій. Розроблені стратегічні установки з його управління. Розроблена структурно-функціональна модель служби здоров'я. Дослідження розвиває перспективний науковий напрям, забезпечує його методологічне обґрунтування та концептуальні основи. Розвиток основ управління якістю здоров'язберігаючої діяльності освітніх організацій з'явиться як важлива методологічна, теоретична й практична проблема.

**Практична значимість.** Використання отриманих результатів в освітній практиці дозволяє забезпечити досягнення якості здоров'язберігаючої діяльності освітніх організацій і тим самим підвищити рівень стану здоров'я тих, що навчаються.

**Ключові слова:** *якість здоров'язберігаючої діяльності освітніх організацій, міжнародні стандарти ISO, управління якістю, структурно-функціональна модель служби здоров'я*

**Цель.** Исследование направлено на обоснование концептуальных положений обеспечения качества здоровьесберегающей деятельности образовательных организаций и разработку стратегических установок по его управлению, основанных на положениях международных стандартов ISO.

**Методика.** Из числа теоретических методов использованы историко-логический, сравнительно-сопоставительный, аналитический методы, системный анализ, моделирование, прогнозирование. Эмпирические методы включали изучение и обобщение педагогического опыта.

**Результаты.** Разработаны концептуальные положения обеспечения качества здоровьесберегающей деятельности образовательных организаций, раскрывающие его сущность и представленные в форме целей и принципов управления. Установлено, что реализация выделенных в исследовании принципов управления качеством здоровьесберегающей деятельности обуславливает необходимость выделения за счет внутренних резервов образовательных организаций структурного подразделения – службы здоровья, обеспечивающего реализацию основных направлений здоровьесберегающей деятельности и включающего в свою структуру ряд специализированных подразделений (медико-санитарно-гигиеническое, валеолого-педагогическое, физкультурно-оздоровительное, психолого-педагогическое, мониторинговое). Работа подразделений ориентирована на соответствующем их специфике направлении деятельности, в описании которых наиболее полно представлены все аспекты здоровьесберегающей деятельности образовательных организаций с учетом межведомственного социального партнерства. Во главе службы и каждого из выделенных подразделений находятся их руководители, наделенные соответствующими полномочиями и ответственностью. Несмотря на общность выполняемых подразделениями функций (диагностико-прогностическая, информационно-консультативная и научно-координационная), внутри службы, при сохранении единого стратегического направления деятельности,

разведены сфери компетентности специалистов, задействованных в здоровьесбережении.

**Научная новизна.** Уточнено понятие „качество здоровьесберегающей деятельности образовательных организаций“, рассматриваемое как степень способности организации выполнять на требуемом уровне свои функции по сохранению и укреплению здоровья обучающихся. Определены концептуальные положения обеспечения качества здоровьесберегающей деятельности образовательных организаций. Разработаны стратегические установки по его управлению. Разработана структурно-функциональная модель службы здоровья. Исследование развивает перспективное научное направление, обеспечивает его методологическое обоснование и концептуальные основы. Развитие основ управления качеством здоровьесберегающей деятельности образовательных организаций предстанет как важная

методологическая, теоретическая и практическая проблема.

**Практическая значимость.** Использование полученных результатов в образовательной практике позволяет обеспечить достижение качества здоровьесберегающей деятельности образовательных организаций и тем самым повысить уровень состояния здоровья обучающихся.

**Ключевые слова:** *качество здоровьесберегающей деятельности образовательных организаций, международные стандарты ISO, управление качеством, структурно-функциональная модель службы здоровья*

*Рекомендовано до публікації докт. екон. наук А.Г. Мокроносим. Дата надходження рукопису 30.11.14.*

УДК 330.342.23

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## IMPLEMENTATION OF SUSTAINABILITY PRINCIPLES INTO SYSTEMS OF BUSINESS MANAGEMENT – LINKING SUSTAINABILITY TO BUSINESS STRATEGY

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## ВПРОВАДЖЕННЯ ПРИНЦИПІВ СТІЙКОГО РОЗВИТКУ В СИСТЕМІ УПРАВЛІННЯ БІЗНЕСОМ – ПОЄДНАННЯ СТІЙКОСТІ ТА ДІЛОВОЇ СТРАТЕГІЇ

**Purpose.** The paper is focused on identifying and analyzing of current state and use of the Sustainability Concept in the business management and assesses the possibility of integration of sustainability principles into business strategy.

**Methodology.** In terms of research methodology the work is based on comprehensive analyses of the Balanced Scorecard approach from the perspective of Sustainability Development Concept carried out by the results of the survey, desk research, along with expert interviews.

**Findings.** Analysis of theoretical approaches to the assessment of use of sustainability principles in the business management is made. Theoretical and methodical recommendations how these principles could be involved in practice via The Process of Building Sustainability Balanced Scorecard System are formulated and this is further validated in a case study on OKD (Ostravsko-karvinské doly, a.s.), the only producer of hard coal (bituminous coal) in the Czech Republic.

**Originality.** Based on theoretical and practical knowledge authors will develop methodology that will enable the implementation of the sustainability principles into corporate strategy through the Balanced Scorecard. This fact allows to point out the relation between social, environmental and economic dimension of business strategy within a Sustainability Balanced.

**Practical value.** This paper offers a systematic review, which is crucial, not only for advancing an academic field, but also for informing management practice and show the way how to incorporate sustainability in practice.

**Keywords:** *balanced scorecard, strategic management, sustainability, strategy, sustainable development*

**Introduction.** The view on an enterprise is changing. Only statements on financial position and performance are not sufficient. Any enterprise tends to be seen as an entity not only economic, but also social and environmental (Fig. 1). Achieving a sustainable development is a new phenomenon of current business practice. It responds to a new situation in the contemporary world. It is a vision of a desirable develop-

ment of human society, including the question of economic development on the one hand together with environmental protection and social issues, on the other.

Application of the sustainability principles and tools plays an important role in improving corporate performance. The concept of eco-efficiency and socio-efficiency cannot do without information provided only by traditional management. With regard to the fact that the rational behavior of a company consists of process management in the best way possible, for management it is necessary to have an available