

## THEORETICAL FOUNDATIONS OF MANAGEMENT OF THE EDUCATION SYSTEM: OPTIMIZATION OF THE COMPLEX OF ORGANIZATIONAL AND PEDAGOGICAL CONDITIONS FOR EFFECTIVE MANAGEMENT

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**Abstract:** The article defines the organizational conditions for effective management, the actions of the team to implement the concept of marketing management using the tools of pedagogical and strategic management. Due to this, results are achieved - indicators, since in our study they will be indicators of managerial efficiency: improving the "organization" function through the construction of new organizational structures; improving the functions of "analytical activity and planning" through enriching managerial work with economic and gnostic methods, analytical activities with the mandatory inclusion of financial activities, introspection of all participants, widespread use of licensed automated systems; synthesis of educational, economic, social results.

**Keywords:** Innovative teaching, Higher education, Teaching technology, Information Technology.

### 1 Introduction

The socio-economic processes taking place in society and directly related to preschool education are pushing for a rethinking and improvement of management methods. This is due to the creation of the necessary organizational and pedagogical conditions that contribute to the organizational, economic and pedagogical efficiency of management and allow, on the one hand, to build a modern organizational and economic mechanism for preschool education and, on the other hand, to improve the pedagogical process, solving not only the tasks of education and upbringing but also to protect and promote the health and development of children. Domestic and world experience in the functioning of the system of preschool education clearly confirms the need and importance of improving the organizational and economic mechanism in this industry. The improvement of this mechanism should be carried out taking into account the specific historical conditions. In the early nineties, there were key positions in the renewal of the Soviet kindergarten - protecting and strengthening the health of children (both physical and mental), humanizing the goals and principles of educational work with children, emancipating the living conditions of children and the work of educators in kindergarten, ensuring continuity between all spheres of the social development of the child, a radical change in the nature of the training of teaching staff, the conditions for financing preschool education and the restructuring of the management system. These positions continue to improve at the present time. Polat (2021).

The system of kindergartens and nurseries, monotonous in organizational form, content and applied technologies, was replaced by a differentiated system of preschool education aimed at meeting the needs of various groups of the population. Along with kindergartens that provide a traditional set of educational and social services, preschool institutions have appeared that

provide an expanded range of modern services. Iasechko, Kharlamov, Skrypchuk, Fadyeyeva, Gontarenko, Sviatnaia (2021). Analyzing the dynamics of the development of the network, it should be stated that it has undergone significant changes, which are characterized primarily by a variety of organizational and pedagogical conditions. Iasechko, Iasechko S., Smyrnova (2021). The variety of existing organizational and pedagogical conditions throughout the network is largely due to the difference in setting goals and objectives for management activities, the implementation of a multifaceted set of leading management functions, and the changing demands of society on the education system. At the beginning of our study, we sought to see in the already existing scientific approaches the integrity of the organizational and pedagogical conditions for effective management in modern socio-economic trends.

Unfortunately, in the literature on the management of an educational institution, we did not see the integrity of the organizational and pedagogical conditions for effective management in modern socio-economic trends, which is important for us.

However, the analysis of literary, educational and scientific sources allows us to conclude that there cannot be a single, established hierarchy of functions in the management cycle. In different conditions of the existence of an organization, a certain management function may become a priority. Hence, the sources studied by us, summarizing the experience of effective management of educational institutions in different conditions, do not fully consider the components of effective management, revealing only in a unidirectional approach. Iasechko, Shelukhin, Maranov (2021).

Thus, we have come to the need to create such a theoretically verified integral set of organizational and pedagogical conditions for management, which will be the key to the effectiveness of management in modern socio-economic trends. The revealed situation helped to define the problem of our research more narrowly: to determine the components of an integral complex of organizational and pedagogical conditions, which allow achieving organizational, economic and pedagogical efficiency at the same time.

The purpose of the article is to identify, theoretically substantiate and experimentally test a set of organizational and pedagogical conditions that increase the efficiency of managing an educational institution in modern conditions of modernization of the socio-economic sphere, and to further test the effectiveness of management through a variety of efficiency values.

### 2 The initial presuppositions

In the article, the following research methods were used to solve the set tasks: theoretical (study and analysis of scientific and pedagogical, psychological and pedagogical, reference, specialized literature, regulatory documentation on the topic of research, additional professional advanced training programs; analysis, comparison, classification of the information received and generalization); empirical (pedagogical experiment, observation, questionnaire survey, survey, conversation, testing); mathematical (statistical data processing).

### 3 Methods

Management as an independent science takes its beginnings in such an area as production. Today there is not a single area of activity that would not pay special attention to management. They have different approaches to the definition of the concept of "management" in various works of scientists, first of all, they

differ in their goals of management activity and clarification of management functions. In our study, we will structure them by type of science.

According to the procedural approach, management is considered as a process, which is a set of continuous interrelated activities (actions and operations). The activities of a leader based on the division and cooperation of managerial labor, characterized by heterogeneity, certainty, complexity and stability, are called managerial functions. Each function is also a process, since it, in turn, consists of a series of interrelated actions. The system approach as a scientific methodology uses, on the one hand, a more general, and on the other hand, a more rigorous understanding of the term "system". The objects of analysis and managerial influence are considered not by themselves, not in isolation, but in connection with many other objects and phenomena. In this regard, there is a need to clarify the concept of "system". (from Greek) - a whole, made up of parts, a connection - a community of elements that are in relationships or connections with each other, having a certain integrity, unity. The concept of "system" in its special meaning is used as a set of specific objects, existence or duration which are interrelated due to sufficiently certain circumstances. The most characteristic features of the system are the complexity of the object, its integrity, the ability to usually be divided into subsystems, to be, as a rule, an element of a higher order system, to form a special unity with the environment. Through organization, each part of the system interacts with others in a process of information transfer and regulation, the purpose of which is to preserve both itself and other parts of the system. All objects, parts (subsystems) function in time, space, develop as a whole. The study of isolated parts cannot provide adequate information about the system. The system, as a whole, is divided, it consists of elements; properties that depend on their belonging to a particular system, and the properties of the system are reducible to the properties of its elements. All elements of the system are in complex relationships and interactions, of which it is necessary to single out the most significant, defining for the system, as they say, "system-forming connection". Each of the elements of the system is autonomous due to its inherent properties, however, the realization of the potential of each of the elements becomes possible in the presence of all other elements. The ideal idea of the relationship between the goal and the result is a "system-forming factor". The set of elements and relationships gives an idea of the structure of system objects. Important for our study is marketing management - an interdisciplinary approach to management through the study of pedagogical and economic theories in order to find common components for effective management. Marketing management - a system of market orientation of the company. The emergence of marketing management is closely related to the emergence of exchange and the emergence of the market. Marketing is working with the market for the sake of making exchanges, the purpose of which is to satisfy human needs and requirements. Marketing is a set of measures in the field of research of the marketing activities of an enterprise to study all the factors that influence the production process and the promotion of goods and services from producer to consumer. The task of marketing activities for product research is to determine the market needs for new products (services), improve or modernize existing ones. When conducting marketing research to find the most effective ways to promote products on the market, the company's management determines which system of incentives will most effectively manage the process, which is the function of marketing management. All of the above goals and functions of marketing management are product or service oriented. In addition to such a direction of marketing activity, there is marketing focused on the consumer, to meet his needs and requirements. The goals of marketing management are considered in the following aspect: achieving the highest possible high consumption; achieving maximum customer satisfaction; providing the widest possible choice.

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providing the widest possible choice. Marketing management is the analysis, planning, implementation, control over the implementation of activities to achieve the goals of the organization. However, marketing management is only one of the market management systems, it develops a strategy for studying the market and actively influencing consumer demand. The key word in marketing management is strategy. The dictionary definition of strategy presents it as the art of planning leadership based on correct, far-reaching forecasts. "The strategy, as a general global project, has a temporal procedural characteristic. This is a long-term planning for the implementation of the goal of an activity based on predicting the nature of development and changes in the object of planning. The strategy involves the identification of subjects of activity, their preparation and distribution to relevant tasks, as well as the development of methods, methods, organizational forms that ensure the implementation of goals". In marketing management, the following strategies are distinguished: a) conservation, 2) change, 3) development, 4) prevention. In general, the strategy, having a time parameter, develops long-term planning for the implementation of the activity goal, taking into account the forecasting of changes in the nature of the development of the planning object. The strategy involves the structuring of management actions to determine the subjects of activity and the development of methods, methods, organizational forms that ensure the implementation of goals by certain subjects. It develops such marketing tools as knowledge management, development of new organizational capabilities, identification of the development and use of resources and capabilities of the enterprise through strategic management. Strategic management is a scientific strategy in the form of a concept. In the latest works on economics at the turn of the 20th and 21st centuries and the scientific concept of strategic management necessary for our study have already been developed. For example, Robert Grant clarifies strategies as the main functions of management: 1) strategy as a reinforcement of a decision, 2) strategy as a mechanism for coordination, 3) strategy as a goal. "Strategic management is dedicated to management aimed at the most effective management activities. The difference between strategy and planning is that it is not a detailed plan of instructions; it is a unifying theme that ensures consistency and sets a common direction for actions and decisions. "Strategy as a coordination mechanism", "Furthermore, recommends not applying either the rules for formulating strategy or the rules for implementing it separately, as many strategy textbooks teach. He offers an integrated approach and believes that these issues cannot be considered in isolation from each other. "Strategy formulated without regard to its realization, will most likely be destructive and vicious. At the same time, it is thanks to practical implementation that strategies are born and adapted". The concept of strategic management, developed by Peter Drucker, Robert Grant, Graysons, Boris Leibinsky, already has well-established concepts, schemes, methods that are extremely useful for effective management. He plays many roles in the organization. He is able to see opportunities and clearly see the direction and flexibility needed to objectively assess resources. Strategy-based managerial decisions are primarily about external rather than internal issues. A strategic planning system strikes a balance between planning and chance, she owns methods that allow managing randomness. The secret of the success of managerial decisions within the framework of the strategy lies in its easy adaptation, flexibility, integration. Being an initially planned strategy, in the course of work it turns into an implemented strategy, and then it transforms into an unexpected strategy. An unexpected strategy is called decisions that arise as a result of complex processes, during which the subjects of management interpret the planned strategy and adapt it to changing external circumstances. Thus, the strategy acts here both as a goal, and as a reinforcement of decisions, and as an assessment of the existing effectiveness of coordinating management activities.

Thus, the strategy acts here both as a goal, and as a reinforcement of decisions, and as an assessment of the existing effectiveness of coordinating management activities. The concept of management efficiency is associated with various

aspects of the organization's activities: achieving the goal of the activity and approaching the maximum result, the effectiveness of the implementation of the management mechanism and the completeness of the implementation of management functions, the rational use of resources and the optimization of processes in the organization.

Scientific management of the education system is defined as a weighty, conscious and purposeful impact of subjects of various levels on all its links in order to ensure the rising generations, their harmonious development based on the general laws of the development of society, the objective laws of the educational process. Speaking about the management of education systems, we came to such concepts as: education, educational and management processes. The meaning of the word "education" is interpreted as: 1) obtaining systematized knowledge and skills, training, enlightenment, 2) the totality of knowledge obtained as a result of training. In our study, we will consider "education" in a broad sense, meaning training, education and development. Researchers of modern approaches to education give us an understanding of the phenomenon of "education" as "an opportunity for the realization of a person in culture." To make this possibility real, work is underway to determine the strategy of education itself. The concept of "education" is defined in pedagogy as "a holistic process of training and education of the individual, ensuring its development". Education as: the process and result of mastering the system of scientific knowledge and cognitive skills by students, the formation of a worldview, moral and other qualities of a person on their basis, the development of its creative forces and abilities; a public organized process with the constant transfer of subsequent socially significant experience by previous generations, which is the formation of a personality in accordance with the genetic program and socialization of the personality; a purposeful process of upbringing and education in the interests of humanity, society, the state, accompanied by a statement of the achievement by students of the educational levels established by the state. In all these definitions, the word "process" is mentioned. It is important to understand that it is the dynamics of socio-economic changes over the past decades that have led to the importance of a clear differentiation of these processes in the management of the education system: educational and managerial.

As for the management process, there are many definitions. In economic theory, for many years it was defined as a continuous and purposeful process of influencing a group of people to organize and coordinate their activities in the production process, in order to achieve the best results at the lowest cost. "In modern conditions, characterized by humanization, democratization of management, the management process from the point of view of managing social systems is considered as a non-linear interactive multifunctional activity of participants in the social process, equally interested both in obtaining a high result of the organization's work, and in the preservation and development of those participating in this process. people, their relationships and unique subjectivity". Increasingly, in the second half of the twentieth century, and in the works of scientific educators, the importance of managing the improvement of education systems is proved, more and more often they come across such concepts as the management process and its effectiveness. Moreover, educators-scientists consider the management process only in accordance with the educational process. They say that this interaction will be effective if there is a purposeful exchange of information between them. A feature of an effective management process should be considered the transfer of management to autonomization, which is characterized by the weakening of its vertical functions and the development of horizontal structural links with the transfer of maximum powers to them. Another important regularity of effective management is the unity of the ultimate goals and objectives of administrative, pedagogical, family and social influence in the process of forming the student's personality. This means that each managerial act must be imbued with pedagogical expediency. Recognizing the importance of the expediency of management acts, we again believe that each act has the

character of interaction. Such a number of management subjects cannot but interact with each other, if only because each of them acts both as a subject and as an object. An important feature of internal interconnection is considered to be mutual complementarity, complementarity in relation to each other, since they acquire the greatest efficiency in interaction. Research of scientific educators. designate the management process in relation to education systems as an impact based on scientific principles and methods and aimed at the optimal organization of the educational process, ensuring the most complete correspondence of the results achieved with the goal. Harris, Sutton (1986).

Because of this, many scientists in relation to education systems use a multidimensional method, the essence of which is that the study is conducted from the standpoint of applying a set of approaches to the analysis of the object as a whole. The system approach is the backbone principle in the structure of the multidimensional method. It is this definition that allowed us to move forward in our study. Having revealed the first task - identifying and analyzing existing theoretical approaches to "management" and finding the specifics of the conceptual apparatus of the problem of managing the education system, based on the identified, we set ourselves the second task - identifying and analyzing existing theoretical approaches to "effective management" and finding the specifics of the conceptual apparatus of the problem of "effective management".

So, we will try to theoretically identify the main components involved in achieving the goal, analyze them and determine the degree of this involvement. As has already been proven above, in relation to education systems, it is inappropriate to talk about the effectiveness of the management process if the educational process in this system is inefficient. Thus, when setting a research goal to identify the optimal conditions for the effective management of education systems, it is important to simultaneously consider the main components of both managerial and educational efficiency. The position that the management of the educational process should in its essence be oriented towards the upbringing of the individual (pupil, teacher, head of the school) today in the theory of management of education systems is fundamental and needs not so much proof as clarification of what this orientation is. It is believed that the awareness of these ideas is very important in the course of research, because in the modern and previous period there were again attempts to abolish education from the educational process, and everything that was previously related to it was declared socialization. Socialization is the broadest concept in the development of a personality, it involves not so much the conscious assimilation of ready-made forms and methods of social life, but the development (together with adults and peers) of one's own value orientations, one's own lifestyle. Education - is a system of purposeful and deliberate influences on the personality of the child, the process of presenting him with socially significant values and patterns of behavior - it is one of the main ways to implement socialization. Self-education - a highly conscious and independent activity of a person to improve his personality, is predetermined by the leading personal prerequisites that mature in the process of socialization and education. In our opinion, it is this "educational" component that guarantees the success of the educational process. Educational institutions that prepare for life, where the child acts as a personality and subject of activity, should develop children in the following areas, which, in our opinion, are components of pedagogical effectiveness: the development of intelligence; development of the emotional sphere; development of resistance to stress; developing self-confidence and self-acceptance; developing a positive attitude towards the world and acceptance of others; development of independence, activity; development of motivation, self-actualization, self-improvement, incl. and learning motivation as an important element of self-development motivation. Iasechko, Shelukhin, Maranov (2021).

For the management of education systems in the new socio-economic conditions, the concept of "educational service" is important. It could be limited to a common definition where a service is equated with a type of product: a product (service) is

everything that can satisfy a need or need and is offered to the market in order to attract attention, purchase, use, consumption. But we are not interested in "everything", but in what has to do with education. The distinctive features of educational services from the products of material production are characterized: 1) The production of educational services acts in the form of "consumer production", in the form of activity and does not leave a visible, material product. Educational services are intangible. They cannot be seen, touched, tasted. They seem to flow into the consumer and transform him. The very consumption of these services ensures the reproduction of a skilled labor force. 2) Educational services are inseparable from teaching staff. In this regard, the education sector is a wide field of personal contacts between producers and consumers of services. With the growth of personification and individualization of requests for educational services, with the complication of their assortment, the importance of personal contacts increases, and the growth of the professionalism of teachers increases. The impossibility of their storage and transportation, the dispersal and locality of educational institutions and the market for these services are associated with the intangibility and inseparability of educational services. The previous features of educational services make it difficult for the consumer to assess the consumer properties of the services provided. The consumer has the opportunity to only indirectly assess the results of the activities of educators based on the opinions of those who have already used their services and through advertising. Summing up the above, the growth of the educational and cultural level of those working in education is today a necessary prerequisite for their better adaptation to dynamically changing working conditions, especially during the period of structural restructuring of the education economy. Systematic renewal of economics, pedagogy and other sciences requires appropriate knowledge, skills and psychological readiness to make decisions and act in non-standard situations. Here it is important to see again the goals of educational marketing as consumer-oriented marketing, which will contain the main secret of effective management of an educational institution: achieving the highest possible high consumption; achieving maximum customer satisfaction; providing the widest possible choice. Iasechko, Shelukhin, Maranov (2021).

Thus, the first "basics" of market relations in an educational institution require a rethinking of the general, familiar foundations of managerial activity. They automatically entail the need for other knowledge: knowledge of the educational environment, the educational market and consumer needs of customers of educational services. These parameters generally represent the features of the marketing environment, determining the direction and content of a specific educational marketing strategy and being the socio-economic conditions for effective management of the development of an educational institution. Entrepreneurial activity of subjects of education determines their development. It is the program-target management method we have chosen, its interactivity that leads us to the formation of pedagogical management, the rational grain of which is marketing management, which is an interdisciplinary approach to management through the study of pedagogical and economic theories in order to find common components for effective management. The pedagogical management strategy indicates to us the importance of effective coordinating management activities for the implementation of the pedagogical effectiveness of education systems. Pedagogical management consists of elements, mechanisms, functions of educational marketing, the main distinguishing feature of which is consumer orientation. Each component of pedagogical management is the result of a forecast built on the inductive continuation of previous experience, one's own or someone else's, excluding cruelty in management and experimental impromptu, and also has flexibility, taking into account the dynamics of the pedagogical process. Thus, all of the above and our research confirm that the central concept of marketing is strategy. It is important for us to clarify for our study that, first of all, we consider strategy as the goal of both educational and managerial processes, then we consider strategy as a mechanism for coordinating activities to create simultaneously optimal organizational and pedagogical

conditions for effective management, where we can see the components of pedagogical and managerial effectiveness to evaluate the results of our research activities. Now it is important to see the rational grain of economic theory, which will need to be extrapolated and synthesized into the theory of management of education systems. In other words, to enrich pedagogical management with techniques and methods of strategic management. Polat (2021). The key phrase, in our opinion, "enriches" pedagogical management with strategic techniques is an integrated strategy.

#### 4 Results and discussion

Thus, the "rational grain" for the effectiveness of the management of the education system is strategic management, in which there is always an invariable integrity of the management conditions with constant integration of the strategies of this management into them. Hence, in our study, it is important to reveal that complex of organizational and pedagogical conditions for effective management, the optimization of which will allow the educational marketing strategy to be flexible, easily adaptable and integrated in order to achieve both organizational, economic and pedagogical efficiency. To do this, it is important to consider their tools. In our study, we use the word "tools" as a synonym for the word "conditions".

Thus, the analysis of management literature in various theories allowed us to formulate a working definition of management effectiveness as a complex, systemic concept, including a set of interrelated components, reflecting the overall result of management impact on the life of the community, which is assessed through the coefficient of compliance of the results achieved with the goals set by society and the ratio of used resources for the results. Iasechko, Kharlamov, Skrypchuk, Fadyeyeva, Gontarenko, Sviatnaia (2021).

#### 5 Conclusion

Thus, our research has led to the fact that the complex of organizational and pedagogical conditions for effective management in modern trends in the modernization of the market economy and the entire economy of education must realize the invariable integrity of the management conditions with the constant integration of the strategy of such effective management into them, which can be flexible, easily adapt and integrate to achieve both organizational and economic efficiency and pedagogical efficiency: target pedagogical and managerial efficiency (correspondence of potential opportunities and integrated strategies); resource pedagogical and managerial efficiency (comparison in the chronology of the resources expended in the course of implementing strategies for coordinating activities and the results obtained); results of pedagogical effectiveness (development of moral, educational, cognitive and other qualities of children) to reinforce further decisions on the educational process; results of managerial efficiency (economic and organizational order of management and its technological tools) to reinforce further decisions on the management process.

#### Literature:

1. Harris, S., Sutton, R.: *Functions of parting ceremonies in dying organizations*. Academy of management journal, 1986, 19, p. 5-30. Available at: <http://www.gslis.utexas.edu/~ssoy/ usersusers/1391d1b.htm>.
2. Iasechko, M., Shelukhin, O., Maranov, A.: *Evaluation of the use of inertial navigation systems to improve the accuracy of object navigation*. International journal of computer science and network security, 2021, 21, 3, p. 71-75. Available at: [http://paper.ijsns.org/07\\_book/202103/20210310.pdf](http://paper.ijsns.org/07_book/202103/20210310.pdf).
3. Iasechko, M., Iasechko, S., Smyrnova, I.: *Aspectos pedagógicos do autodesenvolvimento de alunos de educação a distância na Ucrânia*. Laplage Em Revista, 2021, 7 (Extra-B), p. 316-323. Available at: <https://doi.org/10.24115/S2446-622020217Extra-B929p.316-323>.

4. Iasechko, M., Kharlamov, M., Skrypchuk, H., Fadyeyeva, K., Gontarenko, L., Sviatnaia, O.: *Artificial intelligence as a technology of the future at the present stage of development of society*. Laplage Em Revista, 2021, 7 (Extra-D), p. 391-397. Available at: <https://doi.org/10.24115/S2446-622020217Extra-D1119p.391-397>.
5. Improvements in version moodle 1.9 [Electronic resource]. Available at: [http://docs.moodle.org/en/Release\\_Notes#Moodle\\_1.9.1](http://docs.moodle.org/en/Release_Notes#Moodle_1.9.1).
6. Index of codes. Available at: [http://www.ecgi.org/codes/all\\_codes.php](http://www.ecgi.org/codes/all_codes.php).
7. Methodology for using an electronic textbook in physics lessons. Available at: <http://works.tarefer.ru/64/100534/index.html>.
8. OECD. Education at a Glance 2016: OECD Indicators, OECD Publishing, 2016, Paris. Available at: <https://doi.org/10.1787/eag-2016-en>.
9. Organization of distance learning using modern ICT. Available at: [http://uotashtagol.3dn.ru/doc/PDF/Dist\\_Obuch/metodicheskie\\_rekomendacii\\_dlja\\_pedagogov\\_obrazova.pdf](http://uotashtagol.3dn.ru/doc/PDF/Dist_Obuch/metodicheskie_rekomendacii_dlja_pedagogov_obrazova.pdf).
10. Polat, E.S.: *Distance learning models*, 2008. Available at: <http://hr-portal.ru/article/modeli-distancionnogo-obucheniya-polat-es>.
11. Technology of creation of electronic teaching aids [Electronic resource]. - Available at: [www.ido.rudn.ru/nfpk/tech/t1.html](http://www.ido.rudn.ru/nfpk/tech/t1.html).
12. What is distance learning. Available at: <http://ra-kurs.spbu/2/0/8/1/?id=28>.

**Primary Paper Section: A**

**Secondary Paper Section: AE**