

Educational system management improvement in a secondary education organization

Mejora de la gestión del sistema educativo en una organización de educación secundaria

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ABSTRACT

The purpose of the article is the development and implementation of a model for managing educational system in a secondary education organization. To implement the model within the school, experimental work was carried out. It was carried out during two years from 2017 to 2018 and included several stages. The article reveals the essence of education and management of educational system for personality development of future school graduates. The authors analyze the activities of the school in the city of Dzerzhinsk in order to identify ways to improve educational system and its management. At the end of experimental work, it was found out that introduction of a management model of educational system into school's activities made it possible to increase the level of familiarization of students to various areas of educational activities. The trainees took part in three municipal target programs the content of which was represented by various educational activities that favorably affect students' personality development. Consequently, innovations introduced into management system in educational system have positive effect on students, which proves the effectiveness of the model developed by the authors.

Keywords: educational organization, students, teachers, education, educational system, management, school, educational process, personality, management structure.

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RESUMEN

El propósito del artículo es el desarrollo e implementación de un modelo para administrar el sistema educativo en una organización de educación secundaria. Para implementar el modelo dentro de la escuela, se realizó un trabajo experimental. Se llevó a cabo durante dos años, de 2017 a 2018, e incluyó varias etapas. El artículo revela la esencia de la educación y la gestión del sistema educativo para el desarrollo de la personalidad de los futuros graduados escolares. Los autores analizan las actividades de la escuela en la ciudad de Dzerzhinsk para identificar formas de mejorar el sistema educativo y su gestión. Al final del trabajo experimental, se descubrió que la introducción de un modelo de gestión del sistema educativo en las actividades escolares permitía aumentar el nivel de familiarización de los estudiantes con diversas áreas de actividades educativas. Los alumnos participaron en tres programas de objetivos municipales cuyo contenido estaba representado por diversas actividades educativas que afectan favorablemente el desarrollo de la personalidad de los estudiantes. En consecuencia, las innovaciones introducidas en el sistema de gestión en el sistema educativo tienen un efecto positivo en los estudiantes, lo que demuestra la efectividad del modelo desarrollado por los autores.

Palabras clave: organización educativa, estudiantes, docentes, educación, sistema educativo, gestión, escuela, proceso educativo, personalidad, estructura de gestión.

INTRODUCTION

In the Russian Federation, all levels of education have undergone major changes (Bicheva, 2017). Under these conditions, it is important to improve the system of general education, which is the basis for development of a student as a person (Bulaeva, 2018). Educational process is divided into two main components: training and education. Education is also a process and activity aimed at personal development, creation of conditions for self-determination and socialization which are based on sociocultural and spiritual-moral values, norms and rules of behavior of a person, family, society and the state. Today, all educational organizations operate within the framework of the new Federal State Educational Standards for elementary general and basic secondary education. Their introduction predetermined the need to restructure the work of educational institutions of general education in accordance with the requirements of the state (Bulaeva, 2018). The educational component which includes extracurricular activities in various areas is one of the components of the main educational program (Garina, 2017). Teachers, class teachers, social teachers, educational psychologists, teachers of additional education and senior counselors and parents take part in educational process (Garina, 2018).

Like any organized activity, education process needs a good management system that performs planning functions (development of a plan of educational work), organization (process of creating a structure for managing the process of education), motivation (the process of encouraging yourself and others to work to achieve the goals and objectives of education) and control (timely detection of deviations from a given program, prompt measures for their elimination or prevention) (Iltaldinova, 2017). Through motivation, the head (director of the school) and representatives of administration influence the activities of teachers and provide solutions to the problems to increase educational process efficiency (Ilyashenko, 2018). The function of monitoring implementation of the upbringing process is implemented in a comprehensive school by monitoring in accordance with the developed indicators, as well as diagnosing development certain qualities with students (level of education, patriotism,

moral qualities of the individual) (Kutepov, 2017). Control is one of management functions through which problem identification and activity adjustment is carried out (Tsyplakova, 2016). In the course of internal control implementation, the following methods are used: observation (research and study of the observed object); analysis (analysis with the identification of causes and determination of development trends); conversation; questioning (questionnaire survey); the study of documentation (in order to familiarize or identify the system of planning and organization of the pedagogical process, or, to obtain other information).

Control functions in the field of organization of educational work are the responsibility of the deputy director for educational work (Vaganova, 2017). We note that the criteria for the effectiveness of the management of the educational system in the secondary education organization should be established for each area of educational work separately (Ilyashenko, 2018). Thus, the process of managing educational system in a secondary education organization is the activity of the school's administration in the implementation of basic managerial functions (Vaganova, 2018). The modern sphere of education management contains a large number of regulatory documents at various levels (Ilyashenko, 2018). However, there are no clear objectives and goals for educational activities. In addition, in secondary education system, there is a tendency to optimize organizational structures to save budget expenditures, and this primarily affects the sphere of human resources and the financing of education (Ilyashenko, 2018). It is possible to eliminate or partially solve this problem by developing and introducing into educational organizations activities new approaches to the management of educational work (Vaganova, 2019).

LITERATURE REVIEW

According to V.A. Slastenin, education is the process of basic culture development in an individual. This process is carried out in a number of areas, namely: philosophical and ideological training of schoolchildren; fostering citizenship and patriotism; the formation of the moral culture of the individual; labor education and vocational guidance; the formation of the aesthetic culture of the individual; education of physical culture of the person.

I.P. Podlasy interprets the concept of "education" as a system which elements are knowledge, belief, skills, qualities and personality traits, as well as sustainable habits of human behavior. I.P. Podlasy defines the purpose of education as "development of a comprehensively and harmoniously developed personality." Education is a part of the educational process in a general education organization and is carried out as part of an integrated system. YES. Karakovsky defined the concept of "educational system" as a set of children and educators united by a common goal and objectives (Smirnova, 2017).

In his opinion, the distinctive features of educational system are: goal and value presence that is socially significant; joint activities of children and teachers and its focus on creating an educational environment within the framework of an educational organization (Smirnova, 2017). By creating an educational system in a general educational organization, conditions are created for developing the personality of students, assimilating their values and norms of behavior. D.V. Korypalov defines the educational system as a set of interacting elements created in educational organizations in order to purposefully promote the development of the personality of students. The process of education in a general education organization is carried out at all stages of obtaining general education by students. The content of education is multidimensional and includes work with participants in educational relations (students, parents) (Pavlov, 2016). The administration and, all teachers of the general educational organization (Perova, 2017) are involved in this activity.

The management of educational work in a secondary education organization is a type of professional activity of a manager aimed at creating conditions for functioning and development of an educational system (Myalkina, 2018). A great contribution to the development of theoretical foundations of management was made by such scientists as M.K. Bocharov, V.G. Afanasyev, V.A. Zverev, Yu.V. Vasiliev, Yu.A. Konarzhevsky, M.I. Kondakov, M.M. Potashnik, T.I. Shamov (Smirnova, 2018). O.S. Vikhansky, A.I. Naumov, speak of management as the interaction that occurs between the object and the subject, carried out in the presence of a control system. The term "management" is interpreted by P.I. Tretyakov as an impact on the object of management which is carried out with the help of legal and economic levers (in a broad sense).

The goal of management is to achieve certain qualitative and quantitative indicators of the educational organization's activities (Vaganova, 2017). M.M. Potashnik interprets management as an activity that is united by a common goal, which is to ensure the development of the educational system (Kuznetsov, 2018). According to V. Lazarev, management is the interaction of two subsystems, controlling and controlled, to achieve the planned results, this is the activity of all the subjects, which is aimed at the development of the control object as a whole (Markova, 2018). Based on the definitions derived by different authors, we can say that management is an independent activity (Potashnik, 2018). Its essence is the ability to influence processes occurring in educational organization,

in particular process of education.

METHODOLOGY

Experimental work was carried out in 2017-2018 school year and included several stages. The purpose of experimental work was defined as the implementation of the model of management of educational system within school.

The first stage (September - October 2017) was accompanied by the definition of purpose and tasks of experimental work. The purpose of experimental work was defined as implementation within the school a model of management of educational system, contributing to improvement of its quality. At the second stage (November – April 2018), measures were taken to test the model of educational system of school in practice. At the third stage (May 2018), analysis and synthesis of the results of the implementation of the management model of educational system of school was carried out. The school has 700 people. We took this number of students for 100%. Since the school implements several areas of educational work, we determined percentage of students involved for each of them in 2017 (before the model was introduced) and in 2018 (after the introduction). In 2017, only 60% of students were engaged in the general cultural direction, the spiritual and moral direction (50%), the sports and fitness direction (65%), the preventive direction (40%). In 2018, these figures were significantly higher. The highest of them was the percentage of the preventive direction (95%).

ANALYSIS AND DISCUSSION

As part of our research, management of t educational system is understood by us as a controlled process of change in various areas of educational work, which has the goal of achieving a certain level of development of spiritual and moral qualities among students, developing their skills of law-abiding behavior, developing creative abilities. Education is part of educational process, and has a complex structure, actively interacting with various actors within educational organization and outside it.

The development of educational system in a secondary education organization, in our opinion, should be based on a deep study of the processes occurring within school.

We highlight the following approaches to modeling the development of educational systems.

Modeling organizational and economic management in a multi-agent social system of educational sector involves determining the sustainability of the educational system, making a forecast of the costs necessary for the functioning and improvement of the system and defining strategies for the interaction of its subjects (Prokhorova, 2018).

As part of agent-based modeling, the parenting system is understood as a single cluster, the management of which is based on the search for conditions for the sustainable development of all its elements.

At present, attempts have been made to develop and implement systems for modeling the process of managing the educational system within the framework of a general educational organization (Smirnova, 2018). However, at present, the issues of application of these modern approaches to modeling are not sufficiently developed.

Use of modern modeling methods helps to improve the effectiveness of decisions in the field of educational management.

As part of the study, we have developed a model for managing upbringing process in a comprehensive school. The purpose of the proposed model of management of educational system can be defined as raising the level of management of educational system, which includes assessing the real state of the managed system making management decisions and monitoring their implementation.

The content block includes directions of educational work (civil-patriotic education, spiritual and moral education, a positive attitude to work, intellectual and health-saving education).

Among the objects of management, we have identified: teacher (the formation of individual, author, system of pedagogical activity of teachers); teaching staff (forming a team of like-minded people); the general system of continuous education (the introduction of scientific achievements in the practice of education in school).

In the structure of managing the process of education, the head of the school is appointed, then his assistant (in

our model we suggest introducing a second assistant for the distribution of duties and more precise control) is chosen. Subject teachers are in charge of the first assistant. The second must exercise control over school education department (social pedagogue, psychologist pedagogue, senior counselor, additional education teachers, day-care center educators). Also parent committee, whose activities are necessary in any school, including school number 27 of the city of Dzerzhinsk should be in charge of the second assistant.

The process and technology unit is represented by the organization of social projects, social partnership and psychological and pedagogical support.

The model uses such methods and tools for working with students as: master classes; psychological training; collective creative affairs; individual conversations with children; carrying out cultural and leisure activities; activities of additional education associations; prevention council activities; the work of mentors of minors students, who are on the preventive register in the internal affairs bodies; activity of student government.

An effective block is represented by an increase in the level of management of educational system.

The model we developed was introduced to the activities of secondary school No. 27 in the city of Dzerzhinsk. The school management structure is typical for educational institutions of secondary education. The direct management of the school is carried out by the director, deputy directors for educational work, educational work, for administrative and economic work. The school has successfully operated public bodies involved in school management (Public Development Council, parental committee, trade union committee). Collective school management bodies are: General Assembly of Employees, Pedagogical Council, Public Development Council.

The Community Development Council is a permanent collegial management body of the Institution, operating on the principles of legality, democracy and informational openness. The activities of the Social Development Council are state-social in nature.

At school number 27, the management decision-making process is divided into levels: strategic, tactical, and operational. Strategic level (discussion of issues at a meeting of public school management bodies, discussion at the pedagogical council, management decision is made out by the order of the director); tactical level (discussion of issues at the meeting of the school administration, the management decision is made in the form of the director's order) operational level (management decision is expressed in the direct transfer of instructions to the Executive).

The managerial activity of a manager in a secondary educational organization is carried out in relation to a specific teacher, the teaching staff and in relation to the general system of educational work.

The direct organizer of educational work at school is the deputy director for educational work. His duties are related to the performance of functions of directing the process of education. In the conditions of a comprehensive school, all pedagogical workers are involved in educational process. So, duties of the teacher included educational functions. Teachers also carry out extracurricular activities on the subject taught, during which educational tasks are also solved.

The principal provides overall management of the educational organization, including educational system. Direct leadership of it is in the competence of the deputy director for educational work. He defines the goals and tasks of educational work, draws up a plan of educational work of the school for the academic year and manages the activities of school teachers (class teachers, social pedagogue, educational psychologist, senior counselor, teachers of additional education, educators of extended day groups).

In addition, the deputy director for educational work leads the methodological work in the field of education. He, together with the head of the school education department, develops a work plan to improve the competence of school teachers in solving education problems.

The implementation of social work in a comprehensive school is within the competence of a social teacher.

The planning function in the management of the educational system MBOU school number 27 of the city of Dzerzhinsk is implemented through the development and implementation of a plan of educational work. The plan of educational work is a document that defines the goals, objectives, directions, forms of this activity. Thus, educational work at school number 27 is carried out in a planned manner.

As a result of the analysis of the organization of internal control in the field of educational work at school No. 27 in Dzerzhinsk, we identified the problem that the representatives of the public (members of the Public Council for Development and the Parent Committee), school specialists (social teacher) were not involved in the control. This disadvantage makes control solely the prerogative of the deputy director for educational work and reduces its effectiveness. Educational work remains closed from public control, which is in conflict with the principle of

openness of educational systems and implementation of the model of state-public management in the practice of managing educational organizations. This again necessitates introduction of a new model into the activities of the school. This model was developed by us.

To eliminate this drawback and to improve management of educational system of school, we carried out work. Experimental work was carried out in the 2017-2018 school year and included several stages.

The purpose of experimental work was defined as implementation of the model of management of the educational system within the school.

At the first stage (September - October 2017) the goal and tasks of the experimental work were determined.

The purpose of experimental work was defined as implementation within school of the model of management of educational system, contributing to the improvement of its quality.

At the second stage (November – April 2018), measures were taken to test the model of educational system of school in practice.

At the third stage (May 2018), an analysis and synthesis of the results of the implementation of the management model of the educational system of the school was carried out. An analytical report on the results of experimental work was presented to the school principal.

During this time, the school has developed activities aimed at cooperating with parents - these are traditional parent meetings, school-wide parent committee meetings, classroom parent meetings, organizing concerts for parents, open doors for parents, inviting them to school holidays, sports events, design congratulations for holidays.

During the year, work with parents was carried out, the purpose of which was to provide psychological and pedagogical knowledge through parental meetings, consultations of school administration, class teachers, a social pedagogue and a psychologist on pedagogical correction, developing relations between children and adults in individual families, individual conversations about features of age and methods of approach to the upbringing of the child, neglect and delinquency. A school social passport was compiled to analyze the social environment of students at the school and organize competent work with parents. Indicators of the target block of the model of management of the educational system are presented in table 1.

Table 1

Indicators of the target block of the model

№ p/p	The name of the program or plan	Program Result (specifically)
	Municipal target program "Patriotic education of residents of the city of Dzerzhinsk" for 2018	- Meetings with veterans of the Second World War; -the holding of thematic classroom hours; -participation in the regional stage of the All-Russian festival of creativity cadet "Young Talents of the Fatherland"; -conducting the school stage of the competition "Nizhny Novgorod School of Security - Zarnitsa"; -participation in the city stage of the competition "Nizhny Novgorod School of Security - Zarnitsa"; -participation in regional competitions: cadet classes, review competition of military-patriotic associations No {1,2,3 places) regional competition dedicated to the memory of police captain Marveyev SN; -organization of excursions around the Corner of Military Glory: stands "Dzerzhinsky - Heroes of the Soviet Union", "Victory Leaders", "Great Patriotic War", "Outstanding commanders and naval commanders of Russia", organizing excursions;

	<ul style="list-style-type: none"> -work of the school museum named after Hero of the Soviet Union M. Jalil, conducting excursions; - the work of the military-patriotic association "Streletsy"; -organization and conduct of school sports competitions; -participation in urban competitions on military-patriotic themes - implementation of a joint work plan with the Department of Internal Affairs for Dzerzhinsk, a police department station in Dzerzhinsk. - joint work with the inspector of PDN; -prevention of prevention councils; -the implementation of the project of joint activities with the MBU JV "KCDRM" Youth Initiatives"; -publication of leaflets for parents; -organization and work of the UID (participation in the city competition of essays and drawings "The road through the eyes of children" -conducting the competition of propaganda teams -participation in the All-Russian competition "I am a citizen of my country", dedicated to the 40th anniversary of the UID units. -the holding of thematic classroom hours;
<p>Municipal target program "Prevention of neglect and juvenile delinquency of the city of Dzerzhinsk" for 2018</p>	<ul style="list-style-type: none"> -organization and rehabilitation of children from families in difficult life situations; -conduct psychological training; -conduct individual conversations, counseling for parents; -organization of associations of additional education; -organization of legal education of students and their parents. - implementation of the project of joint activities with MBU JV "KCDRM" Youth Initiatives"; - monitoring of the drug situation; -the holding of thematic classroom hours; - meeting with the methodologist narcologist; conduct psychological training; addressing students on problems of drug addiction; Voluntary anonymous immunochromatographic testing of students for non-medical consumption of narcotic and other toxic substances; - registration of informative stands on healthy lifestyles; -parent meetings with the invitation of experts; - participation in the regional anti-drug month "We choose life";
<p>Municipal target program "Comprehensive measures to counter drug addiction, substance abuse and the fight against illicit trafficking in narcotics and psychotropic</p>	<ul style="list-style-type: none"> -conduct individual counseling for students and their parents.

In 2018, 3 targeted municipal programs were implemented, in which students from school No. 27 of the city of Dzerzhinsk took part. From this it follows that the school's leadership has begun to actively involve its students in various types of educational activities that allow students to fully develop. After the introduction of the model, the activity of all school structures is directed to the socialization of students, including through their active participation in educational activities at various levels, which have a positive impact on the development of the student's personality and the development of its creative component.

The school is actively developing several areas of education. We analyzed the number of students involved in each of the areas before the introduction of the model (in 2017) and after (in 2018).

Among the directions: general cultural, spiritual and moral, sports and fitness, preventive direction.

In the general cultural direction only 60% of the students were engaged, the spiritual and moral direction (50%), only 65% of the students were involved in the sports and fitness area, only 40% of the students managed to attract the preventive direction.

The following figure shows the results that appeared after the implementation of the model.

The percentage of students increased in each type, especially in preventive (from 40% to 95%). Table 2 presents the analysis of preventive work with students, which shows a decline in 2018.

Table 2

Number of students of school number 27 registered for the period from 2017 to 2018

	2016-2017 academic year	2017-2018 academic year
Consist on intraschool accounting	7	1
boys	6	1
girls	1	0
1-4 grades	1	0
Registered in the juvenile affairs department	5	1
boys	5	1
girls	0	0
high school students	0	0
Intra-school families	9	4
Families in the juvenile department	0	0

By 2018, the situation on crime prevention has improved, the number of students and families registered both in the school and in the juvenile affairs department has decreased.

Thus, during experimental work at school, the model of management of educational system was tested.

CONCLUSION

In our work we achieved our goal. We have developed a model of managing education process and introduced it into the activity of School No. 27 of the city of Dzerzhinsk. The percentage of students involved in various types of educational activities has grown significantly. In addition, the problem we identified when analyzing the activity of School No. 27 was resolved: the representatives of the public (members of the Public Council for Development and the Parents Committee), the school's specialists (social educator) were not involved in the control which reduced effectiveness of educational activities in general. We have introduced these positions in the field of educational management, as well as offered a second assistant director. A clear delineation of duties allowed raising the level of educational work at school.

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