Original article

ORGANIZATIONAL AND PEDAGOGICAL CONDITIONS FOR TRANSITION TO PROJECT MANAGEMENT OF A PRESCHOOL EDUCATIONAL ORGANIZATION

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Received: 28 June 2023 Revised: 26 July 2023 Accepted: 23 August 2023 Abstract: The Russian education system is currently undergoing a process of digital transformation at all levels. These changes are due to socio-economic development, demographic processes, needs of society, peculiarities of production, where human potential is replaced by artificial intelligence and other environmental factors that have a significant impact on the microenvironment of an educational organization. All these processes require a change in the management model, which could meet the trends in the development of society, quickly transform and modify. The article proposes a project management model, flexible, situational, as well as organizational and pedagogical conditions that contribute to the implementation and use of the developed management model in preschool educational organizations (PEO), regardless of the form of ownership (municipal, state or private). One of the most important conditions for the transition to digital management of PEO is the professional development of teachers in the field of digital education, the practical use of digital equipment and interactive platforms in the classroom, it is also very important to select management personnel, change the scheme for appointing managers who must have competencies in the field of management, marketing, economics, risk management and personnel, and not just have a set of pedagogical knowledge, skills and abilities, as it is now. However, the implementation of the project management model at the moment turns out to be difficult, the transition to it should be phased, as the first stage, the authors of the article propose the implementation of the organizational and pedagogical conditions described in the work.

Keywords: Development factors; Digital transformation; Management model; Motivation; Digital education.

1. INTRODUCTION

Modern trends in the development of the socioeconomic sphere in Russia, including those related to the transition to a digital economy and the digitalization of the educational process, require leaders to adopt and implement a new model for organizing management activities, which is primarily associated with finding ways to improve the quality of education, meeting the needs for training and education and maintaining the competitiveness of an educational organization in the market of educational services. In this regard, the attention of researchers is drawn to the search for a new management model that

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would correspond to the new educational paradigm (Solovova & Strekalova, 2018), as well as the national policy in the field of digitalization (National program "Digital Economy of the Russian Federation", 2023). Preschool educational organizations faced this problem. According to the Federal Law "On Education in the Russian Federation" (Federal Law No. 273-FZ of December 29, 2012), the management of an educational organization is carried out on the basis of the principle of unity of command and collegiality, which makes it possible to implement a democratic approach to management and develop optimal solutions, taking into account the opinion of the collegiate bodies functioning in this organization. Thus, based on this principle, we can talk about the project (matrix) management of an educational organization.

In Russia, educational organizations mainly use a linear-functional management model; it is implemented in preschool organizations, general educational organizations, organizations of secondary professional education and higher education. However, this management system is unable to meet the trends in the development of society, as it limits the leader in actions and choice of management tools (Organization management models, 2023).

Thus, the researcher E. P. Sedykh (2018) notes that "educational systems are in search of new forms and ways of organizing their own activities aimed at optimizing activities and increasing their own mobility due to high manageability". This thesis indicates that management specialists are developing new tools and a management model, as well as conditions for the transition to an innovative system.

I. V. Zimina (2018) speaks about the need for project management of educational organizations, suggests an algorithm for constructing project management, since the practice of its implementation in educational organizations in Russia is still very weak. This is due to the fact that the matrix system of management organization is associated with risks, and personnel with critical and at the same time flexible thinking, able to interact with the team, and manage innovative projects are also needed. The authors E.V. Savenkova (2019) writes about the effectiveness of the implementation of project management in an educational organization, who believe that "the project approach in management contributes to the growth of the innovative potential of an educational organization, the positive dynamics of the quality of management of educational systems". And this corresponds to the trends in the development of modern society.

Thus, the development of a project management model and its adaptation to a specific educational organization is one of the urgent issues, since its solution will improve the quality of educational services provided in educational organizations, optimize material and technical costs and create conditions for demand growth among potential consumers.

2. MATERIALS AND METHODS

The purpose of this study is to adapt the project management model by changing the culture of professional activity, including through the inclusion of professional ethics and robotics, changing the system of values and the way of action of teaching staff, through the training of with appropriate personnel competence. including supra-professional competencies possession involving the of digital technologies, the ability to interact with artificial intelligence and robotics, the creation of a productive team for the implementation of ambitious undertakings. And, also the of those organizational definition and pedagogical conditions that would contribute to the introduction of the developed model in the management of a preschool educational organization, ensured the transition to project management. For this purpose, a study (questionnaire) of teachers of the MAPEI "Kindergarten No. 75" in Chelyabinsk was conducted. The results of the survey showed that 95% of respondents spoke in favor of the need for digital transformation of preschool organizations educational and the improvement of the educational process using digital tools. However, the survey also showed that teachers can only use standard computer programs, which necessitates the need to improve their digital literacy. The obtained data indicate that at the moment preschool educational organizations are not ready for the

transition to digital management, and, consequently, to the project-based organization of life. The data are published in the article "Readiness of a preschool educational organization for digital transformation" (Pustovoytova et al., 2022). Therefore, in this paper, we propose for consideration the organizational and pedagogical conditions for a phased transition to project management. An analytical and critical analysis of the sites of preschool educational organizations operating in the Russian Federation was also carried out.

3. RESULTS

Currently, project management is replacing the existing management model, which is not able to meet the requirements of the digital

economy. The introduction of the project management model will allow a preschool educational organization (PEO) to increase the efficiency of its activities and the level of demand in the market of educational services in this area and the quality of their provision through the participation in the educational process of teaching staff, whose level of professional training will be soft skills (Pustovoytova, 2022) and assistant robots. Also, minimize time costs through a clear organization of strategic planning and project work in conditions of uncertainty and rapid variability of the external environment, save material and technical resources and make your offer more attractive to a potential consumer. Figure 1 shows the project management model.

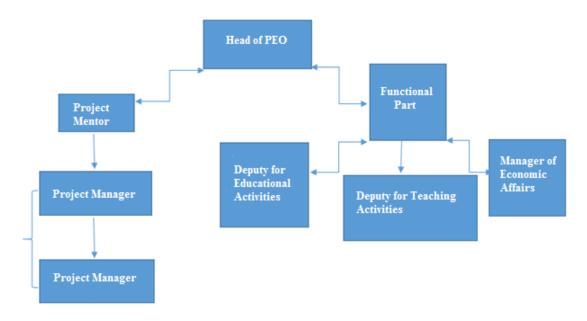


Figure 1: The model of project management of PEO

This model is based on the principle that a formal head is at the head of a preschool educational organization, who is responsible for the distribution of the salary fund, material and technical equipment, recruitment and implementation of educational activities, i.e. carries out direct management of the PEO. Deputy managers are responsible for educational activities, training, and the manager for the economic part for the functioning of the organization as a whole. However, today such a traditional management principle does not allow the PEO to develop and meet the challenges of the external environment, to meet the needs of participants in educational relations (teachers, parents, children). A promising model is seen with the inclusion of a project approach to management, where this function will be performed by a mentor of projects, i.e. a specialist with an appropriate level of qualification, a portfolio of projects and marketing solutions that allows for the development of a preschool educational organization, and its services will be in demand by a large number of potential consumers. This can be educational projects (for example, teaching English, chess, gamification, virtual and augmented reality, and others), educational and recreational projects (sports activities, participation in various events, dances), investment projects (profitable investment of funds earned by preschool educational organizations). Such a model should thus competitiveness support the of the organization, economic stability and further development in an unstable, uncertain and rapidly changing world. To ensure the implementation of this model of project management in a preschool educational organization, human capital is needed. Nowadays, preschools have a certain staff of

teaching staff, who, first of all, provide the function of caring for and looking after children, according to the job description, while participation in projects becomes a voluntary matter. This is one of the reasons why the organization does not develop, does not participate in projects of the scale of the city, region, country or world level.

As an experimental model, we propose a project approach to the selection of teaching staff for the implementation of strategic tasks. The model is shown in Figure 2.

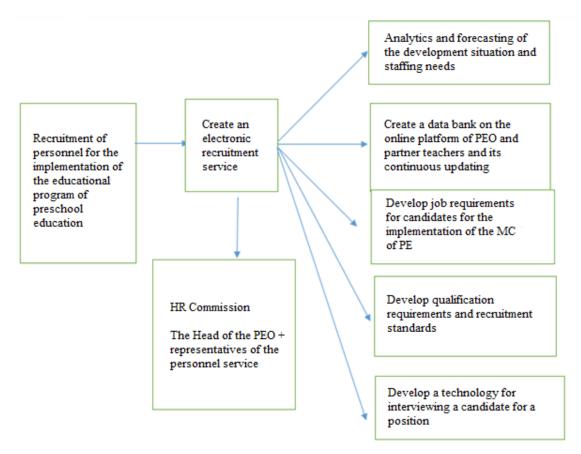


Figure 2: Model of the project approach to recruitment

This model complements model 1 in terms of the project approach. If the project mentor decides to launch a project, then he forms a team that includes specialists in various fields, for example, an eco-preacher, a game teacher, a game master or others, is headed by a project manager who is directly involved in the selection of personnel and establishes cooperation with them, forms an electronic database of personnel, who perform their functions on a contractual basis or outsourcing, receive a fee based on the results of the project. That is, this is the staff who are not responsible

for caring for and looking after children, but are responsible for the development and implementation of innovative technologies that will allow the educational organization to be in demand in its market niche, to move from the state of the "scarlet ocean" to the "blue" (Kim Chan. Renée Mauborgne). Model 2 technologically describes the selection of personnel for the implementation of design decisions of project managers with mentoring, so that it is personnel, or rather their absence, that does not become a "bottleneck" that interferes with the implementation of projects

that provide the strategic priority of the organization. The project manager develops the criteria for the selection of personnel, the technology of the interview, the conditions and mode of work, the cost of his payment. However, the legal decision on the admission of certain persons is made by the direct head of the PEO, as well as strategic planning is within his competence. The mentor of the projects and the heads of the project groups only fulfill the delegated powers, but their activities do not contradict the general concept of the development of a preschool educational organization.

However, in order to move to a new digital control paradigm, the following conditions must be met:

1. Retraining and training of teachers in the areas of digital education. The need to train personnel with digital competencies, in particular the gamification approach to education, is expressed by the authors of the article "The impact of gamification on the motivation in teaching future social studies teachers" by I. Yildiz et al. (2021). Researchers positively evaluate this tool and also point to the formation of sustainable motivation among future teachers.

2. Increasing staff motivation for continuous education and self-improvement.

3. Capacity building of managerial personnel with managerial competencies.

4. Close interaction of preschool educational organizations with marketing companies.

One of the difficult problems is to increase the motivation of teachers for digital transformation, which is associated with the workload of teachers and the age composition. However, the solution to this problem is seen as follows:

1. Organization of educational events with children through Internet resources.

To implement this condition, educators now have a whole range of digital educational Internet resources that will help them prepare for any form of educational events with children: classical organized educational activities, quests, leisure, entertainment, etc. Digital technologies and Internet resources also allow pupils of preschool groups to take part in various competitions remotely. In this matter, preschool teachers can use the opportunities provided by the educational authorities of various levels, which organize many interesting competitions for preschoolers in various areas, including online sports competitions. This allows teachers and their pupils to participate in competitions and achieve high results even under the current restrictions associated with the pandemic.

In addition, with the help of digital tools and the Internet, pupils of preschool groups have the opportunity to participate not only in competitions, but also in conferences, presenting the results of their first research and projects.

As a successful example of the implementation of this condition is the educational portal "Games and activities for preschoolers", developed by the City Methodological Center of the Department of Education and Science of the city of Moscow in cooperation with portal experts - educators of preschool departments of Moscow schools. This portal is a tool that greatly facilitates the life of a teacher and helps in long-term planning of work with preschool children, in the selection of interesting video materials, ideas for children's creativity, ideas for reading with children or play activities. The main content of this resource is educational videos on all areas of preschool education presented within the framework of the Federal State Educational Standard of PE. There are interactive virtual excursions to different corners of the globe, the children will learn everything about the representatives of the animal world, the world of plants. You can introduce children to the world of professions, the basics of some sciences, teach children to do simple experiments, develop musical abilities, etc. A significant tool of the portal is the children's calendar of events, which presents video materials for children within the framework of various holidays and thematic days. And this is just one vivid example of a digital educational resource for preschoolers (Reschikova, 2019).

2. Interaction with parents (legal representatives) through various messengers and social networks.

Modern parents are very active, mobile, busy people who use digital capabilities, including various Internet resources, so preschool teachers simply need to integrate into the information environment and actively use modern means of communication in working with parents. The teaching staff of the PEO can successfully use social media pages in working with parents, thanks to which parents (legal representatives) can quickly get acquainted with the news of the PEO, learn information about children's successes, receive advice and consultations from specialists of a preschool educational organization. Information can be submitted in the format of short videos, photographs from various children's events. An important tool for online communication with parents is the official website of the educational organization, which should always contain the most relevant and up-to-date information. In each group of the preschool department, it is desirable to place QR codes, with the help of which parents can quickly switch to the information resources of the educational organization (Kayumova, 2019; Zimina, 2018).

Cloud-based tools also help with interactions with parents, such as sending videos from children's performances and holidays for parents to view through cloud storage and information sharing services. A convenient and useful tool is the kindergarten YouTube channel - this is another option for cloud-based video content sharing with parents.

Internet resources allow teachers to forget about paper questionnaires when conducting parent questionnaires or surveys. In this case, cloud services come to the aid of teachers to create electronic questionnaires that will allow them to receive feedback from parents promptly, quickly and as conveniently as possible, as well as automatically process the results (Balashova, 2019).

In a difficult time from an epidemiological point of view, it is very important to maintain close contact with parents, ensure information openness of the educational organization's activities, parents' awareness of the educational process, using modern and affordable digital tools (Batyrova, 2020).

3. Implementation of the distance form of preschool education.

Starting from the spring of 2020, the whole world, including Russia, is going through a rather difficult period, it was a difficult time for each of us to self-isolate. A series of changes and difficult processes has made its own adjustments in all spheres of our life. Fundamentally, this problem affected all representatives of the education system, which in a very short period of time had to reorganize itself on new "rails", quickly switch to completely new and unusual for everyday use digital and remote tools of the educational process.

At this difficult moment, the teaching teams set themselves the following tasks:

- to prevent the loss of close contact with the families of pupils;
- to prevent a kind of "fall out" of children from the process of mastering the educational program;
- to organize a remote educational process.

In order for the distance learning process to take place for all participants in educational relations in the most comfortable conditions and without any technical difficulties, the teams took three digital tools as a basis:

- the official website of the educational organization;
- accounts of the preschool department in social networks;
- Google cloud tools: Google cloud drive, YouTube video hosting.

Through these channels, parents were sent interesting tasks for children in all educational areas of preschool education. Teachers posted information in the form of links to educational Internet resources on the pages of websites and social networks of educational organizations, as well as through cloud storage.

Links to the materials were sent to parents via messengers - it's simple, convenient and fast. It is important that content sent to parents is viewable on any device and can be accessed where it is convenient for families.

The implementation of this organizational and pedagogical condition can include master classes on non-traditional methods of visual activity, modeling, applications, making figures in the technique of "origami", design. Video master classes for parents, in which teachers teach drawing on fabric in the "Batik" technique, introduce the features of the "Decoupage" technique, drawing techniques in the "Dry Brush" technique, share the secrets of home decor and ideas for organizing family leisure, etc.

It is important to pay special attention to ensuring the motor activity of children. A physical education instructor should prepare new videos for children.

Another interesting idea for distance education is the online project "Fairy Tales from your favorite educators". Within the framework of this video section, teachers read to children their favorite program works (fairy tales, short stories, poems, fables), if possible illustrating them in the process of video editing. This will allow, in the conditions of "distance", not only to make up for the program work with children to get acquainted with fiction, but also to give the children a lot of positive emotions from the fact that they heard the voice of their favorite teachers.

Thus. within the framework of this organizational and pedagogical condition, all work with children should be based on the use of modern, public Internet tools, which will allow the teaching staff to start remote work as soon as possible and get good results. Thus, we can conclude that the use of modern and publicly available digital Internet resources is an excellent way to establish communication between participants in educational relations, the ability to ensure the information openness of an educational organization, as well as a way to organize a distance form of preschool education.

4. The use of digital tools in improving pedagogical competence.

This condition can also be implemented using the possibilities of digitalization (Krugovaya et al., 2021). The Chinese researcher Zi Zhang in his work "Application of digital intelligent communication technologies in modern education methodology" writes that traditional teaching methods do not meet the requirements of the present, while digital technologies allow for applied research in education, which is an important indicator of the work of a scientist 22 (Zhang, 2022).

Currently, every teacher of preschool education can present his successful professional experience to a wide audience. For this, all the necessary conditions have been created, which are implemented remotely online on the ZOOM and Microsoft Teams platforms. These can be speeches at various educational forums, seminars, conferences. For example, in Moscow, projects are being implemented to exchange the experience of teaching staff, a remarkable example is the project of the Moscow Center for the Development of Human Resources in Education "Mutual learning of Moscow schools" (Belukhina & Osterman, 2017).

The issue of advanced training of teachers of preschool education in recent years has ceased to have grounds for any restrictions or inconveniences. Educational organizations implement truly relevant advanced training programs in a remote format, the curricula of which contain the latest and most relevant information for effective work with children. A significant advantage of the distance form of advanced training is that a teacher from any region can master the capital's advanced training program, which is very convenient.

We also note the electronic system of certification of teachers, which can become a convenient and effective tool for a teacher. The entire certification procedure should be as comfortable as possible and not tear the teacher away from his professional activities with children.

Digital technologies provide an opportunity for teachers to participate in the competitive movement in a remote format.

5. The use of digital tools in solving daily and operational tasks of a preschool teacher.

Drawing up working documentation (a program, a plan for educational and educational work with children, maintaining a time sheet for children), exchanging files with colleagues or co-editing documents - in this case, cloud tools come to the rescue again.

The use of the MIRO interactive whiteboard

contributes to the remote work of not only teachers, but also a kindergarten teacher can use it. The MIRO interactive whiteboard is a simple and convenient tool for visualizing information, which can be easily used to plan an open lesson plan, for notes, letters, drawing, and any other necessary information.

Currently, there are computer programs that allow methodologists and educators to most conveniently carry out monitoring activities to assess the level of assimilation of the educational program by pupils.

There are software solutions for conducting operational and thematic control by methodologists and senior educators in a preschool educational organization. Digital tools come to the aid of the teacher in absolutely different working moments and can significantly save time (Beshaposhnikov et al., 2020).

6. The use of modern technical means in working with preschoolers.

More and more modern technical means are being created to implement the tasks of preschool education. For example, teachers in working with children have the opportunity to use an interactive whiteboard, demonstrating educational video content to children, apply interactive tasks such as:

- pictures, puzzles. With the help of appropriate programs, you can create simple mathematical problems in a playful way. Thanks to this, the child will be able to learn to count, think logically and perform other tasks in a relaxed format;
- graphic projects. Today there are great opportunities for teachers to use an interactive whiteboard. It is possible to present a picture with undefined elements and give children the opportunity to complete the work. Preschoolers will be able to acquire and develop artistic and creative skills.

A modern technical tool in solving educational problems of cognitive development is the "Interactive Sandbox" complex. This modern tool has become a logical element of the digital educational environment of the preschool department and a modern way of demonstrating educational material that helps to increase the cognitive activity of preschoolers.

Thus, the integrated implementation of the organizational and pedagogical conditions described above for the use of digital tools in solving the problems of preschool education reveals a number of advantages for teaching teams that allow a preschool educational organization to be effective, modern and achieve high results in a number of areas of its activity.

4. DISCUSSION

Therefore, we can conclude that the proposed model of the project organization of the DOE management can be effective and will solve strategic tasks. However, the transition to it is seen in the long term, since it is necessary to fulfill a number of conditions: increasing the economic potential of the organization, training and recruiting personnel with innovative thinking, primarily with the competencies declared in the Atlas of new professions (Atlas of new professions, n.d.), development, infrastructure marketing activities in education (Pustovoytova, 2021) and others. One of the stages of the transition to a matrix management system is the implementation of those organizational and pedagogical conditions outlined in this article. The project (matrix) model of managing a preschool educational organization, proposed by the authors, will solve the following problems:

- 1. Increasing the competitiveness of the organization and demand in the market of preschool educational services.
- 2. A distinct division of functional responsibilities, the elimination of duplication of labor operations, and the development of the organization are the responsibility of the project team, led by a mentor. Additionally, a competent teaching staff is responsible for the care and supervision of children, as well as educational activities.
- 3. Delegating authority to competent personnel in the field of organizing projects and their implementation frees up time for strategic planning of the organizations' development.
- 4. The organization of project management

in preschool educational institutions is based on the use of digital resources and tools, which significantly reduces the time for making managerial decisions in the face of its shortage.

- 5. The head of the preschool educational institutions will have time to conduct a SWOT analysis, which will allow him to see the potential of the preschool educational institutions, possible risks, and minimize adverse environmental factors. He will also be able to maintain internal balance and avoid staff turnover in conditions of instability and to save money on the services of consulting agencies.
- 6. During difficult circumstances, for example, during the COVID-19 pandemic, participants in educational relations will not be excluded from the process of education and upbringing, but will be able to continue their educational path through distance technologies. The project team forms a plan of activities within the shortest possible time, and the teacher implements them.

5. CONCLUSION

The practical significance of the work presented by the authors lies in the fact that the stated organizational and pedagogical conditions are successfully implemented in the MAPEI "Kindergarten No. 75" in Chelyabinsk and the first results have been obtained, which are reflected in the motivational readiness of the pedagogical and managerial staff of the preschool educational institution for digital transformation and transition to project management. The proposed management model for a preschool educational institution is deemed promising, particularly for those organizations that plan autonomous functioning and development, make financial independently decisions without the involvement of the municipality or the state, allocate the budget for material and technical equipment, and the payroll fund for teaching staff, project teams, and marketing activities.

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