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## USING PROJECT ACTIVITIES TO PREPARE FUTURE TEACHERS FOR SELF-EDUCATION

### Abstract

Professional training of teaching staff is an urgent task of science and practice of higher education. This article analyzes in detail self-education in higher education. The implementation of project activities is one of the effective ways to solve this problem. Teachers of modern preschool educational organizations are generalists, perform many functions, work in conditions of rapidly spreading innovative technologies and, accordingly, should be aware of current development trends. Self-education is a necessity for all employees of the educational sphere.

The authors of the article present the results of practical scientific and pedagogical research organized on the basis of the Pavlodar Pedagogical University named after A.Margulan. The article focuses on the experience of using the project method in the process of professional training for self-education of future teachers of preschool educational institutions.

**Keywords** - self-education, project activities, future teachers, preschool education, curriculum, university.

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## ИСПОЛЬЗОВАНИЕ ПРОЕКТНОЙ ДЕЯТЕЛЬНОСТИ ДЛЯ ПОДГОТОВКИ БУДУЩИХ ПРЕПОДАВАТЕЛЕЙ К САМООБРАЗОВАНИЮ

### Аннотация

Профессиональная подготовка педагогических кадров является актуальной задачей науки и практики высшего образования. В данной статье подробно анализируется самообразование в высшей школе. Внедрение проектной деятельности является одним из эффективных способов решения этой проблемы. Педагоги современных дошкольных образовательных организаций являются универсалами, выполняют множество функций, работают в условиях стремительно распространяющихся инновационных технологий и, соответственно, должны быть в курсе современных тенденций развития. Самообразование - необходимость для всех работников образовательной сферы.

Авторы статьи приводят результаты практических научно-педагогических исследований, организованных на базе Павлодарского педагогического университета им. Ә.Марғұлан. Основное внимание в статье уделено опыту применения метода проектов в процессе профессиональной подготовки к самообразованию будущих педагогов дошкольных образовательных учреждений.

**Ключевые слова:** самообразование, проектная деятельность, будущие педагоги, дошкольное образование, учебные программы, университет.

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## БОЛАШАҚ ОҚЫТУШЫЛАРДЫ ӨЗДІГІНЕН БІЛІМ АЛУҒА ДАЙЫНДАУ ҮШІН ЖОБАЛЫҚ ҚЫЗМЕТТІ ПАЙДАЛАНУ

### Аңдатпа

Педагог кадрларды кәсіби даярлау жоғары білім беру ғылымы мен практикасының өзекті міндеті болып табылады. Бұл мақалада жоғары мектепте өздігінен білім алуға егжей-тегжейлі талданады. Жобалық қызметті енгізу-бұл мәселені шешудің тиімді әдістерінің бірі. Қазіргі мектепке дейінгі білім беру ұйымдарының педагогтары әмбебаптар болып табылады, көптеген функцияларды орындайды, қарқынды дамып келе жатқан инновациялық технологиялар жағдайында жұмыс істейді және сәйкесінше қазіргі даму тенденцияларынан хабардар болуы керек. Өздігінен білім алуға - білім беру саласының барлық қызметкерлері үшін қажеттілік.

Мақала авторлары Павлодар педагогикалық университетінің базасында ұйымдастырылған практикалық ғылыми-педагогикалық зерттеулердің нәтижелерін келтіреді. Ә.Марғұлан. Мақалада мектепке дейінгі білім беру мекемелерінің болашақ мұғалімдерінің Өзін-өзі тәрбиелеуге кәсіби дайындық процесінде жоба әдісін қолдану тәжірибесіне назар аударылады.

**Түйін сөздер:** өз бетінше білім алу, жобалық қызмет, болашақ педагогтар, мектепке дейінгі білім беру, оқу бағдарламалары, университет.

**Basic provisions.** Preschool educators carry out a range of activities related to the education and development of preschool children. In the process of preschool education, language skills, vocabulary, social skills, basic mathematical and natural science concepts are formed. Performing various functions, the educator becomes the one who helps young children to socialize, prepare for learning through games, interactive activities, communication, and the subject-spatial environment. To implement these functions, the teacher of preschool organizations must have high-quality training that provides for the creative adaptation of acquired knowledge, skills, formed abilities and competencies. This requirement creates the need to modernize the system of professional training of future teachers of preschool organizations, in connection with which a review of educational programs, strategies and tactics of education in higher education is initiated [1, p. 132]. In reforming the education system, much attention is paid to the self-education of future teachers.

**Introduction.** The relevance of the problem of self-education is explained by its positive impact on the cognitive sphere of personality, and as a result, on the success of teacher training. In an article published in the journal *Perspectives on Psychological Science*, researchers T. Gurekis and D. Markant from New York University showed that cognitive psychology offers several explanations for the benefits of self-education. For example, self-study helps «optimize our educational experience, allowing us to focus on useful information that we do not yet possess, and on information that we do not have access to, through observation» [2, p. 342].

The nature of independent learning helps to process information, preserve it over time, forms analytical skills, a tendency to research, and contributes to the realization of personal potential. The desire for self-education demonstrates a person's willingness to develop. The issues of the influence of self-education on the formation of professional competencies, the formation of the personality of a future teacher have become the subject of psychological and pedagogical research in recent years. For example, in his research, I. O. Ganchenko concludes: «Self-education is the highest form of satisfying the cognitive needs of a person and is associated with the manifestation of significant volitional efforts, with a high degree of consciousness and organization of a person, taking on internal responsibility for their self-improvement» [3, p. 54]. In the light of the reforms of vocational education, which focus on providing opportunities for students to exercise independence

in learning, self-education is an urgent field for scientific research and practical experiments in applying the results of methodological discoveries. Modern researchers study the issues of self-education as an element of teacher training in various aspects. For example, D.M.Zharylgapova considered the peculiarities of students' interest in self-education in the system of extracurricular activities. The methods of motivation proposed by this researcher focus on the creation of certain conditions, among which «the presence of a professorial corps at the university – highly educated, erudite, creative, charismatic personalities who are able to meet the challenges of modern times and serve as a role model for the modern generation of students; the presence of a team of trained managers in the field of education, dedicated people who are able to build the educational process and manage it; expression of appreciation and due respect for the intellectual potential of the team; development of an adequate and flexible system for encouraging an intellectual personality (teacher and student), his contribution to the common cause of the university; various ways to encourage students» [4, p. 67]. The above-mentioned conditions reflect modern ideas about the interaction of the subjects of the pedagogical process as a reflection of the essence of its integrity. The incentive system, which is a product of the educational environment, can be a mechanism that influences the motivation of self-education, the formation of the need for creative professional self-realization. However, the organization of extracurricular activities as a factor in stimulating the cognitive activity of students at the present stage is not taken into account in the development of educational programs. Although important professional qualities of a preschool teacher's personality require expanding the field of application of the creative potential of future activities [5, p. 257].

Higher pedagogical education currently provides training of a highly qualified future teacher of preschool education with competent professional skills at the level of World Standards, who knows his professional skills well, as well as has skills in related fields, is responsible, kind, ready to constantly improve his skills and update the baggage of existing knowledge. The content of preschool education is full of humanistic values that have a positive impact on the search for Effective Ways and the revision of the essence of the professional and pedagogical training of teachers of preschool educational institutions, which is a dynamically integrated system of psychological education, ensuring a clear fulfillment of the goals of their activities, as well as covering the functional, personal and social levels of the organization [6, p.382].

Based on the established theory and practice of preschool education, the main direction of highly professional activity of a teacher of a preschool educational institution is the organization of the educational process, the purpose of which is the training and upbringing of a physically, mentally healthy, as well as socially adapted child. The teacher is obliged to create conditions for the disclosure of the individual age potential of each child of the preschool educational institution. Based on this, the professional competence of the future preschool education teacher in the educational process can design the content, methods and forms of the structure of the main program in accordance with the state educational standard of the preschool educational organization.

Currently, as part of the modernization of the education system, the requirements for the availability, efficiency and quality of work of preschool educational institutions will change. The main characteristic of a modern preschool educational institution is the introduction of innovations in the pedagogical process, that is, various options for psychological and pedagogical activity, respectively, the teacher should be able to develop and implement scientific projects. The ability of a teacher of a preschool educational institution to innovative, experimental activities, scientific projects is an indicator of the constant search for modern models of organizing the educational process, increasing the quality of satisfaction of all its participants. Thus, the professional competencies of the future teacher of preschool organizations in the field of research activities take into account the ability of the future teacher of preschool organizations to design stages and directions of scientific and pedagogical research on the basis of their own pedagogical experience and experimental approaches to updating and modernizing the practice of preschool education.

Project activity today is one of the most interesting, developing, important methods for both adults and preschoolers. This is the result of the fact that design in all areas of human activity has become a universal tool that provides focus, consistency and efficiency. Interest in the project as a way of organizing the life of future teachers of preschool organizations is explained by its compliance with the technology of developing learning, the potential for integration and the activity of future teachers of preschool organizations in the educational process. Therefore, the project method has recently become one of the most relevant studies and is being actively introduced into pedagogy.

First of all, the project method of activity is considered as a tool for the formation of a wide range of professional competencies and professional skills. This is due to the nature of activity, the genetic relationship between competence and activity, which is reflected in many scientific works devoted to the problems of training competence. Project activities are aimed at the independent work of its participants. This is individual or group work that is performed for a certain period of time.

A particularly favorable development and self-development of the personality of future teachers of preschool organizations is carried out in conditions of preparation for the organization of design activities of future teachers of preschool organizations, which leads to the production of products of a subjective and creative nature and reflects the personal achievements of everyone, can predict the results of design activities, information obtained for Theoretical and practical.

Creating conditions for the formation of the self-education needs of future teachers of preschool organizations is a strategic task of the entire professional education system. However, it should be noted that independence in learning in the practice of professional training of future teachers of preschool organizations is not always possible to integrate into the content of the educational program. This is evidenced by the result of the analysis of the curricula of the disciplines of the theoretical cycle, which we conducted as part of our research. Despite the fact that modern modular educational programs provide a sufficiently large number of hours for independent work, the form of presentation and the quality of tasks do not allow the formation of competencies related to self-education. As tasks in syllabuses, students are mainly offered: to perform an analysis, prepare a report, a presentation, draw up a diagram, compare, etc. Tasks that require the ability to creatively apply their theoretical experience are not presented enough.

Studying the work of modern researchers, we note that the creative component of the profession of a future preschool teacher has not been sufficiently studied, and, accordingly, is not used in the process of their preparation. Nevertheless, there are studies that are devoted to the study of the use of the specifics of the creative specialty in professional training, for example, T. N.Patsukova studied the preparation of higher school students for pedagogical self-education on the example of music and pedagogical faculties. The researcher considers «pedagogical self-education as a systematic, purposeful, voluntary, independent cognitive activity of a teacher, motivated by deep internal motives, having a reproductive and productive character and aimed at expanding and deepening psychological, pedagogical and special methodological knowledge, their creative processing and integration into a logical and psychological system reflecting the holistic pedagogical process as an object of pedagogical activity» [7, p. 145]. The researcher associates the designated components of pedagogical self-education with the presence of internal readiness for self-education, which is its main condition. In our opinion, the effectiveness of preparation for self-education should be ensured taking into account both external and internal conditions. Researcher T.V. Borisova, in studying the psychological and pedagogical conditions of self-education of future teachers of technology and entrepreneurship, comes to conclusions about the need to take into account all factors in the construction of the educational process, noting the priority of providing methodological conditions that contribute to filling the content of education [8, p. 17]. In the learning process, these conditions orient teachers to choose methods that can stimulate the motives of self-education. These methods should enhance cognitive activity, provide an opportunity to test

their competencies in practice. Among such methods, project-based learning occupies a special place.

Every year there are more and more supporters of project-based education at the pedagogical university. Project-based learning is an educational strategy that allows students to master academic and practice-oriented knowledge, develop the skills necessary for successful professional activity [9, p. 68]. In world practice, project activities are applied at all levels of education. In the system of preschool and school education of the Republic of Kazakhstan, project activities are actively implemented through the content of updated educational programs. Accordingly, a teacher of a preschool educational organization should be able to organize the project work of children, offer solutions to a particular project task, help in providing resources, integrate the efforts of pupils in creating a project product. Thus, the labor market requires graduates of pedagogical universities to be able to put project-based learning into practice.

Pedagogical universities are very careful about using project-based learning for academic purposes. Concerns are caused by the fact that existing education standards contain other requirements for the formation of content [10, p. 107]. Most often, this is a set of knowledge, skills and abilities that do not involve the creative application of practical skills, while a modern teacher should be able to use his accumulated knowledge and experience in changing conditions.

**Materials and methods.** In an experiment organized as part of our research, we used project-based learning in the process of studying a theoretical course, as well as during practical training. The experimental activity, which was conducted on the basis of the Pavlodar Pedagogical University named after A. Margulan, involved students of the 2nd, 3rd, 4th courses who study under the educational program of the specialty «Preschool education and upbringing». During the experiment, students are involved in project work in the process of studying psychological, pedagogical and methodological disciplines. Project work is an educational strategy through which students solve practical problems over several weeks. Such work includes various types of projects, for example, designing a playground, developing a course for preschoolers, etc. Project topics were proposed by teachers, discussed with students, these types of work are planned and performed, as far as possible, by students themselves, individually or in groups. Project work focuses on applying rather than transferring specific knowledge or skills, as well as on engaging students and stimulating their motivation in order to promote the development of critical thinking, self-confidence and the formation of social responsibility.

**Results and discussion.** There are two main approaches to the implementation of the project method. According to the historically older approach, students take two steps: first they are taught in a theoretical course to study certain skills and facts, then they apply these skills and knowledge, creatively and independently go to suitable projects. According to the second approach, learning does not precede the project, but is integrated into it. In other words, students first choose a project, then discuss what they need to know to solve the problem, and learn the necessary techniques and concepts. In the end, they complete the chosen project on their own. In both approaches, time for reflection should be provided at all stages of the project training, which gives students the opportunity to assess their progress. In the course of project activities, a number of small projects are used to help students develop an ever-growing competence in solving practical problems. As the analysis of the results of the experimental work has shown, the second approach can be considered optimal, since in the process of integrating theory and practice, students are provided with tools for mastering the content of education. The practical side of learning when using this approach is authentically integrated into the educational program.

One of the most important components that perform a priority fundamental role in the formation of pedagogical knowledge and skills in the preparation of bachelors is professional practice, presented in accordance with the Order of the Minister of Education and Science of the Republic of Kazakhstan dated January 29, 2020 No. 107 by the following types: educational (introductory) practice, pedagogical practice of 1st year students, psychological and pedagogical

practice of 2nd year students, educational pedagogical practice of 3rd year students, industrial pedagogical practice of 4th year students, pre-graduate practice

The students' professional practice programs are aimed at developing professionally significant pedagogical skills among students:

- planning, forecasting, analysis of the main components of education and upbringing;
- the use of teaching methods and tools that correspond to didactic goals and objectives;
- the use of various forms and methods of organization, implementation of educational, cognitive, creative activities of pupils;
- implementation of an individual approach to pupils in the course of educational and educational work, taking into account the peculiarities of their development;
- conducting pedagogical diagnostics of the state of the pedagogical process;
- evaluating the performance of students, teachers and their own.

Based on the analysis of the targets in the content of the work programs of the practices, we determined that the project method is not a priority to use during the internship, and the use of project activities does not have signs of a systemic nature. In our opinion, it seems promising to integrate the content of practice and project activities of students during the development of the theoretical course. Such work allows us to build the logic of preparing future teachers of preschool organizations to perform professional duties based on a conscious, responsible attitude to their own development, which affects the readiness for self-education throughout their teaching career following higher education.

**Conclusion.** Thus, the analysis of a number of studies devoted to the issues of self-education of future teachers shows the relevance of this problem in modern conditions. Project activity as an effective way of forming professional competencies of future teachers of preschool organizations occupies an important place in the development of motives, knowledge of ways, skills, and skills of organizing their self-education.

An analysis of the course of experimental work shows that in the process of teaching, higher school teachers tend to adhere to traditional methods of organizing the educational process. A teacher at the Kazakhstan Pedagogical University is used to a lecture-seminar system in which students, having received theoretical information on disciplines, supplement their knowledge through searching for information in scientific literature, reinforce them with the ability to transform the received content. Difficulties arise in the application of project-based teaching methods, both in the organization of activities and in the methods of assessment. The identified factors of the effectiveness of project activities in preparing for self-education of future teachers of preschool organizations should be taken into account in the development of educational programs, as well as in filling the content of curricula of individual disciplines.

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