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PEDAGOGICAL CONDITIONS THE FORMATION OF SPECIAL
COMPETENCIES OF THE FUTURE PRIMARY SCHOOL TEACHERS
ON THE BASIS OF THE PROJECT METHOD

Annotation. *The article deals with the pedagogical conditions of forming special competences of future primary school teachers on the basis of the project method. In this context, the authors of the article conclude that the formation of special competencies of future primary school teachers on the basis of the project method forms professional training during the implementation of the proposed pedagogical conditions. Today, the system of higher education in our country is undergoing significant changes. In accordance with the existing regulatory documents related to the field of education, higher education provides for the training of highly qualified personnel in all major areas of socially useful activities in accordance with the needs of society and the state. The modern dynamically developing world imposes qualitatively new requirements for pedagogical staff training. High professionalism and competence, mobility, ability for professional adaptation, constant self-improvement are required from the specialist. In the authors' opinion, to solve these problems it is necessary to widely use innovative teaching technologies, to develop the creative abilities of future teachers, the desire for independent learning, strengthening the connection between theory and practice.*

Keywords: *special competence, project method, future primary school teachers, pedagogical conditions, education.*

Introduction

«Increasing the global competitiveness of Kazakhstani education and science and individual learning on the basis of universal values» is defined as the main goal of the State Program for the Development of Education and Science in the Republic of Kazakhstan for 2020–2025, in order to ensure the continuity of content between levels of education throughout the educational trajectory is of particular importance because it is the basis for defining the content of acquired competencies.

If so, then this implies the formation of special competencies in future primary school teachers that are capable of self-development and the realization of their abilities.

Today the «lifelong learning» paradigm must be replaced by the «lifelong learning» competency paradigm. (continuous education) [1].

At present, much more attention is paid to personal creative abilities and professional qualities of a person, the ability to use knowledge and skills in solving unexpected life problems, and the formation of competence to master other new aspects of knowledge.

New socio-economic conditions of world community development have led to changes in the requirements for professional training of highly professional competent specialists, capable of independent assimilation of new knowledge, creative thinking and search for optimal solutions. – standard conditions and the ability to innovate. In the education system, there is a problem of high-quality training of competitive competent specialists at a new level, aimed at self-improvement and professional growth.

The transition to new educational standards sets new challenges for the University: the search and implementation of pedagogical technologies, teaching mechanisms, and methods of training, ensuring the formation of competitive specialists who meet the requirements of the modern labor market.

In the modern higher education system, the project method is used as a component of the education system and represents the organization of independent activities of students aimed at solving problems and achieving certain results. Project activities of students are aimed at revealing the student's personality, developing interest in educational activities, developing intellectual and creative abilities in solving problems.

Because of the interaction of important programs in the field of world education, the program «Information for All» was published. Also in this program, it is important to teach using information technologies, mainly telecommunications technologies, electronic textbooks and complexes in the educational information system [2]. In this regard, the use of information technology in the formation of special competencies of future teachers, as well as the use of project methods relevant in the formation of professional knowledge and skills, problem solving arising in the educational process.

Materials and methods

In writing the article the following methods were used: analysis and synthesis of psychological and psychological and pedagogical sources of domestic and foreign authors, analysis of legal documents, questioning, special competency projects to identify the condition of future *primary* school teachers. mathematical test of the effectiveness of the pedagogical conditions of formation based on the degree of development of the problem under study, data processing method;

Successful implementation of the pedagogical process is ensured by the fulfillment of pedagogical conditions. Researchers face difficulties based on one-sided thinking about the object of study and a clear understanding of the direction in the process of

identification or founding. That is why we tried to analyze and clarify the concepts of «conditions» and «pedagogical conditions»,

Conditions are a philosophical category, meaning the interconnection of surrounding phenomena, without which she cannot live.

In the concept of V.M. Polonsky, it is considered as a set of external and internal, natural and social influences that affect the formation of personality [3].

«Pedagogical conditions» are aimed at identifying the problems that arise in the implementation of the entire pedagogical process.

The phenomenon of «pedagogical state» in the studies of A.Ya. Nain [4], V.I. Andreev [5], E.V. Yakovlev [6], and other researchers continues in many works.

Scientists describe two aspects of this concept: V.I. Andreev, A.Ya. Nain, N.M. According to the conclusions of such scientists as Yakovleva, pedagogical conditions are considered as a set of measures of the pedagogical process and an objective material and spatial environment. On the other hand, N.V. Ippolatov and M.V. Zvereva presents it as a component that ensures the effective functioning and further development of the pedagogical system. In general, the effectiveness of the creation and functioning of the pedagogical model in our research work depends on the observance of these pedagogical conditions. Let us define a set of pedagogical conditions for the creation, theoretical justification and implementation of the model of the educational environment, taking into account the target areas of research and the effective functioning of this model.

Many scientists express the concept of «pedagogical contract» in different ways:

– V.I. Andreeva «as a result of a purposeful choice and application of organizational forms of education»;

– A.Ya. Nain «as a set of objective possibilities aimed at solving the set tasks»;

Despite the multidimensionality of the concept of «pedagogical conditions», any integral pedagogical phenomenon is associated with a complex of pedagogical conditions. According to E.V. Yakovleva, its structure should be flexible and dynamic. Also, as E.V. Yakovlev and N.O. Yakovleva said, a set of pedagogical conditions should be sufficient [6, 36 6]. The need for pedagogical conditions often characterizes the theoretical part of scientific work, and sufficiency is reflected in the results of experimental scientific work.

Conditions are described in pedagogy as external conditions that affect the effectiveness of the educational process. Researchers such as A.S. Belkin, L.P. Kachalova, E.V. Korotaeva define pedagogical conditions as an external environment that positively affects the success of the process, or as a set of measures of pedagogical influence.

N.M. Borytko proposes to understand pedagogical conditions as an external condition that significantly affects the implementation of the pedagogical process consciously designed by the teacher. These situations do not occur by chance. Organizational forms,

methods and techniques of teaching to achieve specific goals are the result of identifying, generalizing and using components of the entire pedagogical process as content [7, 396].

Then, the presence of pedagogical conditions is explained by the fact that the goals and objectives of the study are different, as well as by the peculiarities of theoretical and methodological approaches in accordance with the requirements of the new society for future specialists.

Our task at this stage of pedagogical research is not only to present a meaningful description of each pedagogical condition, but also to prove the potential of the prepared model to increase its effectiveness and to prove the adequacy of the conditions that contribute to the effective functioning of pedagogical conditions. The effectiveness of the formation of special competence of future primary school teachers based on the project method in providing conditions for the implementation of pedagogical conditions is based on the following conditions:

The first condition is the development of intrinsic motivation of primary school teachers: in the implementation of this proposed first pedagogical condition, the development of intrinsic motivation to form special competencies of future primary school teachers based on the project method. The development of internal motivation of future primary school teachers is a relevant qualitative indicator of the effectiveness of the educational process. The realization of his professional potential, the manifestation of the need, interest and priority in the implementation of the general personal and professional orientation depend on productivity.

The second condition is to focus on the content of this process when applying the subjects studied in the curriculum, which will ensure the scientific and methodological process of implementing the project method in the process of forming the special competence of future primary school teachers. The content side of the educational process includes basic textbooks, teaching aids, methodological proposals, a set of material and technical conditions. That is why, first, it is necessary to clearly define the structure and content of combining theory and practice, taking into account the implementation of the scientific and methodological support for the process of forming the special competence of future primary school teachers based on the project method.

The third condition is the use of various forms and methods of work (academic and non-academic) for the formation of special competence based on the project method. The results of a theoretical analysis of the formation of special competencies of future bachelors of education in the specialty 5B010200 – «Pedagogy and Methods of Primary Education» characterize the need to use and improve existing images and methods of work based on the project method

Therefore, with this it is necessary to consider the methods and methods of using traditional and interactive forms and methods of work on the formation of special

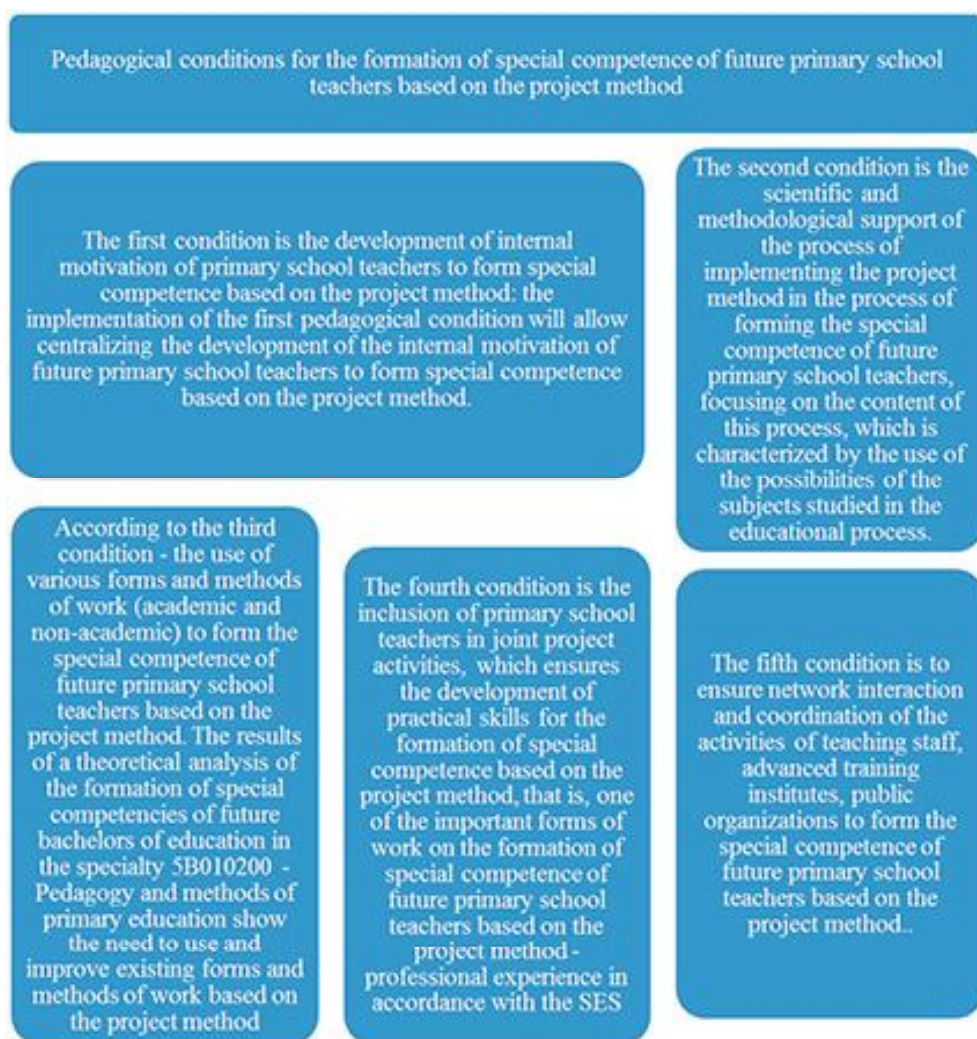
competence of future primary school teachers based on the project method [8]. Currently, traditional lectures on the formation of special competence based on the project method, as well as those aimed at developing the creative abilities of participants in the educational process, are actively used. A pedagogical complex consisting of two content-organizational components (in the process of training future primary school teachers, case studies, modular training, Smart-learning, the use of the mind-map method and the use of modern information technology tools) and activity-competence (transformation of future teachers from object to the subject, the implementation of the transition to the position; modeling of pedagogical conditions) is a description. These classes protect learning outcomes, improve knowledge, systematize, analyze lessons, self-organization flexibility, research, individual and group work, business games, debates, brainstorming, seminars, laboratory work, etc.); types of activities: distance learning, online, webinar and coaching, provide an opportunity to prove your opinion, protect your theoretical knowledge when designing educational activities[9].

The fourth condition is the inclusion of primary school teachers in joint project activities for the formation of special competence in the implementation of practical skills based on the project method, and one of the important forms of work is the formation of special competence of future primary school teachers in accordance with the SES for professional activity based on the project method. The implementation of this agreement based on the principles of the relationship between theory and practice. Since the basis of knowledge is experience, theoretical knowledge is necessary for the formation of practical actions. The main feature of this contract is that future primary school teachers must know the meaning of their special competence, as well as be able to apply the acquired knowledge in practice.

As an important form of implementation of the proposed situation, it is better to name pedagogical practice and practical tasks necessary for the formation of special competencies based on the project method.

The fifth condition is to ensure cooperation and coordination of the activities of the teaching staff of the university and advanced training institutions in the formation of the special competence of future primary school teachers based on the project method.

Increasing the effectiveness of the formation of special competence of future primary school teachers based on the project method depends on the organization of the proposed requirements and activities. The unity of these requirements necessitates the intensification of activities to improve skills and increase the work of various centers. On the basis of the project method, favorable relations can be created, as well as rules based on a precise definition of the role and position of each participant, which is aimed at developing the special competence of future primary school teachers.



Picture 1. Pedagogical conditions for the formation of special competence of future primary school teachers based on the project method

The main condition for the preparation of a methodology for practical and experimental work is a generally accepted approach as an integral system-organized process. In order to test the hypothesis put forward by us, experimental work was carried out and special competence was formed on the basis of the project method in the practice of school work. The development and implementation of a model for the formation of special competence based on the project method in the educational process of the university is an experimental work.

Results and discussion

Students of two higher educational institutions took part in the experiment (Karaganda University named after E.A. Boketov and Pavlodar Pedagogical University). To solve the tasks set before us, we used the following methods: interviewing primary school teachers, conducting a survey, analyzing the plan of educational work and monitoring the practice of developing special competencies of schoolchildren.

We offer the following recommendations for the implementation of these conditions, which ensure the effective organization of the process of forming special competencies based on the widespread use of the project method:

- development of intrinsic motivation in the formation of special competence of future primary school teachers based on the project method;
- scientific and methodological support for the process of implementing the project method by future primary school teachers;
- the use of various forms and methods of work (in the classroom and after school hours) with the wide application of the project method to the special competence of future primary school teachers;
- integration of future primary school teachers into joint project activities, which ensures the acquisition of practical skills;
- implementation of the interaction between the teaching staff of the university and advanced training institutions when using the method of projects of special competence of future primary school teachers.

As a result of our study, we describe methodological support for the formation of special competence of future primary school teachers based on the project method. (1-table).

Table 1. Component levels

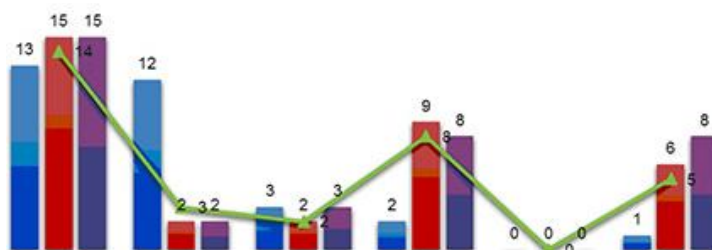
Groups	Low level		Average level		High level	
	start of experiment, %	end of experiment, %	start of experiment, %	end of experiment, %	start of experiment, %	end of experiment, %
CG	80,00	73	17,69	11,98	1,03	5,23
EG-1	86,22	10,11	11,04	50,23	5,89	33,56
EG-2	85,3	17,52	12,00	48,96	4,96	29,26
EG-3	82,30	11,06	16,09	43,08	7,98	41,23

We have determined the effectiveness of the model for the formation of special competence of future primary school teachers based on the project method using the Mann-Whitney U-criterion [10]. We assumed that the level of formation of the special competence of the experimental group exceeds the level of the control group.

In this regard, we formulated the following assumption:

H_0 : sampling levels.

H_1 : sampling levels.



Picture 2. Levels of components in the formation of special competence of future primary school teachers based on the project method

Formation of special competence of experimental and control groups of a comparable level.

The empirical values of the Mann-Whitney measure U are determined by the following formula:

$$U_{emp} = (n_1 \times n_2) + \frac{n_x \times (n_x + 1)}{2} - T_x$$

Here n_1 – test takers of the 1 group;

n_2 – quantity of test takers of the 2 group;

T_x – the larger of the two rank sums;

n_x – the number of test takers in the group with a high sum of rank.

$$U_{emp} = (28 \times 29) + \frac{29 \times (29 + 1)}{2} - 1178.5 = 68,5$$

According to the obtained indicators, we determine the critical values of the Mann-Whitney measure U .

$$U_{kp}(0,05) = 302$$

$$U_{kp}(0,01) = 259$$

Area of significance in empirical values of current indicators.

Conclusion

The final results of the study show that its differences are statistically significant in terms of the value of the correlation coefficient:

1. Qualification levels are enough to form the special competence of future primary school teachers based on the project method. Forming the special competence of future

primary school teachers based on the project method, it will improve the current education, determining the quality of training, focused on the abilities and creative activity of the teacher. We believe that the special competence of future primary school teachers will be formed based on the project method in the implementation of pedagogical conditions.

2. Determined that there are statistical differences in the level of preparedness for experimental work in the control and experimental groups.

3. When forming the special competencies of future primary school teachers based on the project method, certain types of diagnostic methods did not affect the logic of the educational process. If yes, then the implementation of the proposed pedagogical conditions will reflect the characteristics of the study. Analyzing the results of the experiment, we can draw the following conclusions: in order to increase the effectiveness of training future primary school teachers, introduce a methodology for the formation of special competence of future primary school teachers based on the project method in the educational process.

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Педагогические условия формирования специальных компетенций будущих учителей начальных классов на основе метода проектов

Аннотация. В данной статье рассматриваются вопросы использования метода проектов и ее эффективность в условиях формирования специальных компетентности будущих учителей начальных классов.

В этом контексте автор статьи делает вывод, что формирование специальных компетенций будущих учителей начальных классов на основе метода проектов формирует профессиональную подготовку в ходе реализации предложенных педагогических условий. Сегодня система высшего образования в нашей стране претерпевает значительные изменения. В соответствии с существующими нормативными документами, относящимися к сфере образования, высшее образование имеет целью обеспечение подготовки высококвалифицированных кадров по всем основным направлениям общественно полезной деятельности в соответствии с потребностями общества и государства. Современный динамично развивающийся мир предъявляет качественно новые требования к подготовке педагогических кадров. От специалиста требуется высокий профессионализм и компетентность, мобильность, способность к профессиональной адаптации, постоянному самосовершенствованию.

По мнению автора, для решения этих задач, необходимо широко применять инновационные технологии развития творческих способностей будущих учителей, уточняя качества подготовки и уровень самообразования, что позволяет укрепить связь теории с практикой.

Ключевые слова: специальная компетенция, метод проектов, будущие учителя начальных классов, педагогические условия, образование

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Жоба әдісі негізінде болашақ бастауыш сынып мұғалімдерінің арнайы құзыреттіліктерін қалыптастырудың педагогикалық шарттары

Анотация. Бұл мақалада болашақ бастауыш сынып мұғалімдерінің арнайы құзыреттілігін жобалар әдісі негізінде қалыптастырудың педагогикалық шарттары қарастырылған. Осы тұрғыда мақаланың авторлары болашақ бастауыш сынып мұғалімдерінің арнайы құзыреттілігін жобалар әдісі негізінде қалыптастыруға ұсынылған педагогикалық шарттарды жүзеге асыру барысында олардың кәсіби дайындықты қалыптасады деп тұжырымдайма жасайды. Бүгінгі таңда елімізде жоғары білім беру жүйесі айтарлықтай өзгерістерге ұшырауда. Жоғарғы білім берудің мақсаты жоғары білікті мамандарды даярлауды қамтамасыз ету қоғамның және мемлекеттің қажеттіліктеріне сәйкес қоғамдық пайдалы қызметтің негізгі бағыттарына, білім беру саласына қатысты құжаттарға сәйкес болуы қажет. Ілгері дамып келе жатқан заманауи жағдайда болашақ педагогиктарды даярлауға деген жаңа міндеттер қойылуда. Сол себептен болашақ маманнан жоғары кәсібилік пен құзыреттілікті, ұтқырлықты, кәсіби бейімделу қабілетін және өзін-өзі жетілдіруді үнемі талап етіледі. Авторлардың пікірінше, бұл міндеттерді шешу үшін оқытуда инновациялық технологияларды қолдана отырып, болашақ мұғалімдердің шығармашылық қабілеттерін дамытып, білімдерін жетілдіруге деген ұмтылыстарын артырып, теория мен практиканың байланысын нығайту қажет деп санайды.

Кілтті сөздер: арнайы құзыреттілік, жобалар әдісі, болашақ бастауыш сынып мұғалімдері, педагогикалық шарттар, білім беру.