

IMPROVING THE METHODOLOGICAL TRAINING OF FUTURE PRIMARY SCHOOL TEACHERS IN THE PROCESS OF IMPLEMENTING THE NATIONAL CURRICULUM IN THE PRACTICE

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Annotatsiya

Bo'lajak o'qituvchining ta'limda pedagogik tayyorgarlik jarayoniga nisbatan kasbiy kompetensiyasining mazmuni, kelajakdagi kasbiy faoliyatining maqsadlari, vazifalari va tabiati bilan belgilanadi hamda o'qituvchining nazariy, amaliy va motivatsion tayyorgarligi qobiliyatining birligini ifodalaydi. Maqolada ushbu faoliyatni amalga oshirish uchun ta'lim muassasasi bitiruvchisi, ijtimoiy va shaxsiy ahamiyatga ega bo'lgan o'rta maxsus kasb-hunar ta'limi mutaxassislarini tayyorlash muammolarini, vazifani yachishga yo'naltirilgan usullarni, fanni o'qitish texnologiyasi haqida so'z boradi.

Tayanch iboralar

kasbiy kompetensiya, mutaxassis malakasini oshirish, zamonaviy didaktika, texnologiya, ilmiy ishlanma, shakl va bosqich, o'qitish metodikasi.

Fulfillment of the main content of education, specified by the requirements of the State educational standards, which are mandatory for all educational schools of the Republic of Uzbekistan, the approach to the curriculum as a fundamental, theoretical or experimental science, based on the requirements of the time, philosophical and methodological aspects of science require the development of more advanced, effective management methods in terms of the content of education and the teaching method.

Students' cognitive activity in training can be conditionally presented as the activity of solving training tasks and problems while professional activity given in training in the model form can be related to the activity of solving practical tasks and problems. The motives for both kinds of activities will also be distinguished in terms of the object. Thus, the object of the students' cognitive motives is knowledge, which becomes a means of entry into the context of professional activity in the process of training in this case. The purpose and the result

of cognitive activity is the transformation and development of the person himself/herself in the way of acquisition (discovery) of new knowledge, while the purpose and the result of professional activity is the transformation of its object into a product on the basis of the acquired information (which thus becomes knowledge) as a means of such a transformation. The transformation of the object of educational activity in the process of development obviously results in the transformation of the meaning of this activity: the meaning of cognitive activity is transformed into the meaning of professional activity, i.e. transformation of the object, methods and means of the professional activity itself.

In accordance with the theory of context-based learning, knowledge becomes meaningful and active if it is not a goal of learning in itself, but a necessary tool of its actualization, the same as development of the learner. This learning creates the psychological-didactic conditions of turning theoretical knowledge into a tool of work with professional content.

Summarizing the aforesaid, we can say that in a situation of solving any practical task or learning a problem by a future specialist, there are both specifically cognitive motives and practical (professional) motives as the learner uses theoretical knowledge as a means of their solution. This is likely to explain the easiness of assimilating the content of academic subjects, provided, of course, that the learner does not lose the logic of development of the content of these subjects. Generation of professional motives in a situation of knowledge application gives personal meaning to the professional content contained in any learning, and the more so in any professionally similar task or problem which appears to be purely academic for a student in traditional learning.

Based on the above, we consider it necessary to highlight the unity of its three components in the structure of professional competence of a future specialist: theoretical, practical, and motivational. In this connection, it is reasonable to clarify and specify the essence of the concept of "professional competence of a future teacher of a teacher training college" as applied to the process of his/her education in the conditions of a higher educational institution: its content is determined by the goals, tasks and nature of the future professional activity and is a unity of theoretical, practical and motivational readiness and ability of a graduate of the higher educational institution to carry out professional activity.

This article studies the contents and areas of interaction of classical university with general education schools in the development of regional systems of continuous education, and in the creation of the innovative educational environment for retraining, professional development of teachers and heads of schools. The Institute of Continuous Education (henceforth – Institute) created in 2009 is an institutional form of such interaction at the Buryat State University. Our experience shows that the Institutes attractiveness to potential partners is ensured by its reliance on the results of the analysis of educational requirements of educational institutions, the analysis of the educational network and activity of the main competitors (partners). The institute is a structural division of the university that allows it to

carry out educational and methodical, research and project activities to equip pedagogical and administrative staff of establishments of general, secondary, higher professional and additional education with advanced educational technologies. It promotes the creation of conditions for effective development and realization of innovative educational programs and structures according to the demand of the trainee and of the establishment that sent him to training.

Professional development turns into a continuous process, which is based on personal interest, controlled and carried out by the teacher in various options of formal, non-formal and informal education. A starting point of this process is the assessment and self-assessment by the subject of his contribution to the activity and to development of the educational institution. The content of training is defined by a system of professional knowledge, professional competence and personal qualities of the teacher demanded by a particular educational institution at a certain stage of its development. We determine this by the leading technology of professional development design and research activity of the student. The individual project of the trainee on development, introduction and distribution of an innovation providing improvement of quality of work of the educational organization becomes the result of professional development. The use of design technologies develops the trainee as a subject of innovative development of the educational organization, and provides the continuous, initiative and creative nature of professional development according to an individual educational trajectory.

Educational programs based on the project and research activity of a trainee are implemented through educational international expeditions. It is an invariant component where the new models of professional activity of the teacher for work in the conditions of new FSES (Federal State Educational Standard) are formed. The activity of Institute within the international educational expeditions is aimed at:

- a. deepening of inter-academic and international cooperation in the preparation of highly qualified pedagogical personnel;
- b. management of interregional and international educational projects;
- c. ensuring the participation of educational branch specialists in the innovative processes, forming an educational situation in the regions of Russia and the international community;
- d. coordination of activity in the republic, aimed at setting up a comprehensive system of professional development of specialists in the actual areas of modernization of education in integrated network educational spaces.

Priority directions for the development of mathematical education

Based on the above analysis, mathematics in the public education system

It is advisable that the main directions for the development of the teaching of natural sciences be the following:

- ensure compliance with the requirements of the state educational standard in mathematics with international requirements for the quality of education and training, based on the needs of the modern state and society in the future;
- formation of an integral system that ensures close cooperation, continuity and interconnection between preschool, secondary, secondary specialized and professional, higher educational institutions and scientific and methodological research structures;

The international educational project, designed as a way to study systems of historical education in modern Russia and Mongolia, has surpassed its initially set goals, and expanded the boundaries of knowledge of a different historical and cultural environment and educational space. It has led to more essential results in the formation of experience in cross-cultural interactions, respect and interest for the adjacent countries and people, and in self-knowledge and self-realization of students in the course of professional and social, communicative practice. These effects, obvious to all participants in the project, allow us to relate it to innovative forms, not only in the vocational training of students of humanities, who effectively meet the challenges of the modern world, bring up to date a history role in formation of the personality also as a mean of communication in multicultural society; but also to the professional development of teachers of history, as long as they are adequate for the purposes of historical social science education at high school and for the requirements of teacher training:

- improve the quality of teaching mathematics in institutions of general secondary and secondary vocational education, organize and develop a system of mathematical schools in the regions;
- development of a system of training and retraining of personnel in mathematics, in particular, personnel of schools in rural areas;
- improvement of textbooks and teaching aids in mathematics;

Therefore, educational expeditions have become even more actively used in the system of professional development of teachers at our Institute, teaching trainers how to organize the project work of students. It has also become relevant because the new FSES is focused on the project and research activity of students.

Identify talented young people and ensure their successful participation in local and international mathematics competitions and winning prizes:

- qualitatively update the content of mathematics, as well as improve teaching methods, gradually introducing the principles of individualization of the educational process;
- improving and optimizing the content of mathematics and strengthening its mutual integration with other general education subjects;
- application of the acquired knowledge and skills in life situations, the forma-

tion of mathematical literacy, critical, creative and creative competencies;

- introduction of modern digital technologies and innovative approaches to ensure the *efficiency and effectiveness of the process of teaching mathematics*;
- *on the basis of the best foreign experience in assessing the achievements of students and the results of international research in this direction, create a new assessment system and introduce on its basis a national certification system for assessing the level of knowledge in mathematics*;
- *raising the teaching of mathematics to a new qualitative level, including the introduction of new scientific directions and principles for organizing the educational process using modern information and communication technologies, electronic textbooks and modern laboratory equipment*;
- *harmoniously carry out education and training, form students not only as educated, but also spiritually and morally mature individuals*;
- *create a healthy creative environment in mathematics classes, raise the quality of teaching to a new level by introducing advanced innovative modern technologies into the educational and educational process, develop students' horizons, thinking, and logical independent thinking skills*;
- *a radical renewal of the content of circles, optional and optional courses organized outside the classroom school for teaching mathematics*;
- *development of scientific and methodological support for teaching mathematics*;
- *winners of international scientific olympiads and their coaches*
- *improvement of the system for encouraging the work of teachers*;
- *introduction of digital technologies and modern methods in the educational process formation of an innovative infrastructure through knowledge and skills acquired by students in the field of mathematics and show the relevance of their skills to everyday life, conduct educational research in the classroom and extracurricular activities, nurture their design-oriented creativity, develop an interest in creating innovations.*

Students had the opportunity to study the way of life and mentality of the nomad, «traveling in a time machine» in the stylized Mongolian village of the XIIIth century (suburb Ulan Bator). To disclose the subject of the day «Nomadism in the modern historical science of Mongolia: a different country, a different history» the mini-lecture hall in the Academy of Sciences of Mongolia was organized. The results of the project activity were summed up at the annual all-Russian summer school of teachers of history and literature (village Tanghui, Kabansky area, Republic of Buryatia). The project assignments of trainees were focused on studying the historical and cultural space of the Mongolian capital and its suburbs; on the comparative analysis of historical monuments of Russia and Mongolia, and on understanding the history of the neighboring country through the museums, sculptural compositions, visit of schools and universities.

Our project is not the reconstruction of a particular historical event, but is more likely a purposeful complex of various research strategies, studying the content of the historical memory of some events in Russia and Mongolia, and also ways of managing this memory by means of various commemorative actions, factors of the formation of individual memory of the people, and the reasons for the disputability of many issues in modern historical science. Participation in project activity leads everyone who is in touch with history onto a path of formation of critical thinking, a multi perspective vision of the past and the present, the development of empathy, of tolerance, and of respect for the historical and cultural variety of the country and the world. Project assignments do not simply become more and more complicated from one object to another in the analysis of the ways of formation of "historical memory", but also consistently develop key problems of the general project: the coordinates and characteristics of «memory space», the kinds and types of sources, the principles of their selection for the particular «projects of memory», and multilevel analysis of sources, formation of mechanisms of «an image of the enemy». [3]. Working on the project subjects, the trainees studied the historical sources, conducted sociological research, probed into a problem, the essence of which enabled them to become proficient both in new historical knowledge and the ability to work in group, to master the professional competences, both as a teacher and a historian.

As a result of the fulfillment of project assignments, the students have formed the abilities to choose a problem and a subject of research, to compose the program and to select techniques of research, summing up the results of testing, and the analysis and interpretation of the received results. Formation of research competences of the students also took place in the preparation of the written report on the implementation of the project with the use of results of own micro research. The projects created by the teachers during the course of educational expeditions, and in the process of work on the courses and those presented at various levels of conferences, are ideas, approaches and techniques, and recommendations which can be widely used in the work of subject teachers. The experience of educational and methodical activity of teachers of general education schools and higher educational institutions was accumulated in the realization of the joint project development, and can be of interest to the educational organizations of both the scientific and practical plane.

We note that in the course of the development and implementation of the project, not only the positive potential of joint activity in the designated area was disclosed, but also the risks of such interaction, for example, the insufficient level of readiness of a teacher of the higher education institution to work under the conditions of the intensive development of innovative educational processes. Productivity of the approach in the organization of active project activity of students in the course of educational expeditions has been confirmed by the realization and systematization of one's own pedagogical experience by teachers and heads of schools, and their readiness for innovative activity in the conditions of change of an

educational paradigm – such as for innovative lifelong education.

At the same time we should note that in the traditional national system of higher pedagogical education, students start from the first year at the institution solving mostly tasks designed to ensure full-value functioning of their educational activity. They face professional tasks only in their senior years, in the period of their pedagogical practical training, as well as after completion of their education in the process of their independent professional work. In the educational process of a higher educational institution, the student as a subject of professional training masters the profession, its result being his/her professional competence. The future specialist's activity of mastering the profession develops both in the period of accomplishing professional competence when the student interacts with other subjects of the professional-educational process (teachers, small and big groups of fellow students, with himself/herself as the subject of self-development, etc.) and in the period of his/her professional work in the educational institution.

We consider that the reserve of accomplishing professional competence of a future teacher of a teacher training college can be the technological approach, according to which mastering the professional activity is built with account of the pedagogical conditions and psychological mechanisms when, firstly, the learner becomes not just a student but a shaping and developing specialist, and secondly, the potential accumulated by him/her ensures accomplishment of professional competence in the conditions of the modeled, simulated or real professional activity. From these positions, the effective activity of teachers of higher educational institutions in the process of educational interaction with students (future students) is ensured by the psychological-pedagogical mechanisms of acquisition, implementation and development of professional competence.

The competence-based approach to mathematics education involves the acquisition by students of various forms of competencies that allow them to act effectively in situations that arise in professional, personal and everyday life in society. Thus, with a competency-based approach, the basis of mathematical education is focused on strengthening the practical, applied direction.

In order to increase the interest of students in the study of general education subjects through the formation of basic competencies and the implementation of small educational studies, practical exercises, as well as implementation and project work, were included in the curricula in the natural sciences. This situation not only improves the quality of mastering a particular academic subject, but also opens up opportunities for interdisciplinary interaction between science and everyday life, and increases the effectiveness of education.

When organizing mathematics lessons, it is necessary to pay more attention to practice than theory and, to some extent, abandon the approach based on providing students with ready-made learning materials. In mathematics lessons, it is recommended to use more interactive methods, such as case studies, research, projects, small learning discover-

ies. When developing small research skills in students, it is necessary to use such methods of scientific research as observation, experiment, measurement, analysis and synthesis, induction and deduction, comparison and analogy. It is important not only to form students knowledge and skills, but also to acquire competencies for their application in life situations.

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