

THE BASIC DIRECTIONS OF THE ACCOMPLISHMENT OF PREPARATORY CONCEPTION OF FUTURE TEACHERS IN MODERNIZATION OF EDUCATION

Dzhumaev Mamanazar

Professor of Tashkent State Pedagogical University named after Nizami.
Tashkent.Uzbekistan. mamanazaruz@bk.ru

Khudoyberdiev Dilshodbek

Master student of Xian Jiaotong University. Samarkand, Uzbekistan.
khudoyberdiyev.1996@mail.ru

Abstract

The formation value in society's life is mostly determined by the role which is played by people's skills, experiences, abilities, opportunities for development of professional and personal characteristics in the societal development.

The given course prepares future primary school teachers to develop an optional subject system for developing creativeness of students during mathematical lessons. But, this is carried out mostly during optional lessons. On optional lessons a teacher relies on time less and students feel themselves more independently and have communicative relations with each other.

Keywords: The form, preparation, teacher, training, standard, professional, preparation, initial, classes,

Over the past thirty years, many reforms have been carried out in the education of intellectually, physically perfect youth. Mathematics is identified as one of the priority areas for the development of science in our country in 2020. Over the past period, a number of systematic works have been carried out aimed at raising mathematical science to a qualitatively new level.

In order to further improve the system of teaching mathematical science at all levels of education, to support the effective work of teachers, to expand the scale and practical importance of scientific research, strengthen ties with the international community, and also fulfill the tasks identified in the State Program for the Implementation of the Five-Step Action Strategy priority areas of development of the Republic of Uzbekistan in 2017 - 2021 in the "Year of the development of science, education and the digital economy":

Identify the priority areas of improving the quality of education, the development of scientific research and the implementation of scientific developments in the field of mathematics:

- the formation of a holistic system that ensures close cooperation between preschool, general secondary, specialized secondary, professional, higher educational and scientific institutions;
- the introduction of modern pedagogical technologies for the formation of initial mathematical representations in preschool children on the basis of advanced foreign experience;
- improving the quality of teaching mathematical sciences in general and secondary special educational institutions, the development in the regions of specialized schools with in-depth study of mathematics, as well as the creation of new schools;
- the development of a system of training and retraining of mathematics personnel, in particular in schools located in rural areas, the improvement of textbooks and teaching aids in mathematics;
- identification of talented youth, ensuring its successful participation in republican and international mathematics olympiads and winning prizes;
- the creation and implementation of an educational online platform, increasing the effectiveness of the distance education system, introducing mechanisms to ensure the transparency of the assessment system;
- implementation of the National certification system for assessing the level of knowledge in mathematics, increasing classes and improving the quality of education in mathematics in the relevant areas and specialties of higher education;
- ensuring continuous communication with the production of scientific research in the field of mathematics, the development of applied mathematics and the development of mathematical solutions based on modeling problems in economic sectors;
- support for talented young people studying and engaged in scientific research, development of relations with foreign higher educational institutions and scientific organizations in the field of mathematics;
- stage-by-stage bringing of scientific and educational organizations of our country to the level of leading world scientific centers in mathematics.

Preparation of future primary school teachers, improvement of their efficiency are necessary for the serious attitude of young students' towards the determination of their way of independently thinking and the goals of life. That's why, it is very important to inculcate into students' mind right norms of social relationships and an imagination about criteria which will protect them from taking unprecedented actions [1-3].

The efficiency of using the fundamentals of subjects learnt by students at universities in practice requires the following conditions:

- Making preparation for the developing pedagogical culture in students;
- Preparing high-qualified primary school teachers, satisfying personal interests, developing trust;
- Induce internal motivation and interest to learn
- Legislation documents should be respected; train qualifications and experience; motivate students to fight against having no education.
- Work out the directions of methodic readiness of future primary school children which contributes to the development of students as creative persons.

Solving these problems contributes to the developing great mathematical ideas within the school mathematics, enriching mathematical factology with humanitarian domains, finding various examples to mathematical information, the abstract appearance of mathematics in the environment, linking it with human activity, especially, with students' one, observing existing, but rarely coming out mathematical cases, which are beautiful and interesting cases.

It means that in developing professional, especially, methodic skills and experience practice works and its appropriate didactic formation teach to think logically and creatively, analyze cases and facts, establish one's independent own work, helps to show good results at education process, gives an intellectual character to the whole studying and learning process.

One of the main directions of our conception compiles of determination of the meaning of the course "Mathematical methodic" which is linked to the mathematics of primary school; determination of connection of methodical and mathematical education; encourage individual approach of primary school teachers to teaching mathematics; acquiring mathematical scientific research methods by primary school teachers; training teachers to choose mathematical materials which help students to acquire new information; the problems connected with acquisition of an experience by primary school teachers which helps to form a whole understanding about the environment which contributes to the development of a creative student.

The program on the subject of "the Methodic of Teaching Mathematics" was renewed; first time when in our Republic a textbook called "Lab Practices on the Methodic of Teaching Mathematics" has been published. It contains such skills which enriched with such ideas as by humanizing the meaning of education, an idea of new primary education which develops creative primary schoolchildren. For acquiring new skills by lab practice way, future primary school teachers using alternative methods of solving problems, will get to know their efficiency, sensitivity, their descriptive character, and reliance and when working with children they rely on those methods. They base students' activities on their individual character, subjective experience and descriptive quality[5].

Primary school children are considered to be a subject who has preliminary creative characteristics. Developing a schoolchild as a creative person requires taking into account

the synthesized period of the development of the quality of creative character or its components. In teaching primary schoolchildren mathematics acquiring an individual approach by conditions is a warranty of developing a creative person with maximum efficiency.

Teachers' knowledge on psychological and pedagogical fundamentals of teaching primary schoolchildren mathematics helps to develop the operations of thinking in students provides a conscious approach of teachers in solving problems connected with the ways of thinking and acquiring in students. This in turn, contributes to the development of a student as a creative person. In particular, it is very important to educate pedagogues the methodic of teaching schoolchildren some significant primary mathematical conceptions, teaching them to think appropriately, developing skills, solving alternative problems.

Choosing the material which helps a primary schoolchild to imagine the material thoroughly, understand it and bring it to light is based on the followings:

- By the ways of checking the object to teach him/her to think versatile and by the means of plans, to use different methods of analysis in solving problems;
- Teaching the object to choose and solve the problems which require conscious changing; to create a new object (deeply thinking about the meaning);
- Teaching to create such problems which require getting information from other sources, using different types of activity, using direct and indirect way of thinking together, looking through different cases, using different methods of accomplishment;
- In working with students to teach primary school pedagogues the transfer of real items to geometric models, to carry out the transfer from those models to undefined geometric items, to study space figures, to develop unique forms of activity; to teach the methodic of solving problems connected with dividing the figures into parts and making up different figures from those parts, to teach to divide items into parts consciously and making up a whole item from those parts.
- Preparing pedagogues to teach students conscious operations, ways of thinking, e. g. using them in obtaining information, developing reflection, e. g. understanding motivation for obtaining information in children.

During every lesson for efficient development of students besides the main subjects, knowing the identified domain unofficially is required. Talking about unofficial knowledge, we mean not only knowing thoroughly the chosen mathematical module, but also understanding its professional value, believing into the efficiency of the primary schoolchildren's learnt materials. Special and elective courses are considered to be the main component part of teaching mathematics. In identifying the themes of supplementary courses, we rely on the analysis of the meaning of mathematics of primary course, methodic of teaching mathematics, the analysis of the meaning of mathematical courses in primary

schools, the tendency of renewing and completing the mathematical courses, taking the Governmental Standards into account, professional activity of a future primary school teacher. Special courses and optional courses for students: “Activities and Their Introduction”, “The Methodic of teaching students making up geometric items”, “ Solving Non-Standard Problems as the Development of Students’ Creativeness”. These are used by future primary school teachers for working out compositional optional subjects[6].

The given course prepares future primary school teachers to develop an optional subject system for developing creativeness of students during mathematical lessons. But, this is carried out mostly during optional lessons. On optional lessons a teacher relies on time less and students feel themselves more independently and have communicative relations with each other. Our special courses and optional courses help a student to acquire needed methodic- mathematical preparation.

The system of optional science of this special course compiles of three goals: 1) increases mathematical degree, enlarges the volume of skills integrated on the special course of mathematics; 2) increases the methodic fundamental, acquires methodic skills; 3) the material of this special course should be connected with the primary school mathematical course, the ways of acquiring, as for the ways of acquiring them, they should be linked to the methodical ways used in primary schools. Preparation for working out the system of extra classes based on the learnt materials which are connected with a whole mathematical idea which contains the elements of innovation and as much as possible the ones of history, aesthetics and which has various applications and acquired skills help primary school teachers to accomplish it.

In the system of preparing primary school teachers within the primary educational faculties on special and elective courses one should pay much attention to geometry. Its main characteristics are compiled of the followings: relying on the visual way of thinking, imagining with the help of space, imagination, intuition, a student’s methodic-mathematical preparation:

- It requires a non-standard approach to solving geometric problems;
- Solving geometric problems by the means of geometric instruments. This is of a great importance, because, a teacher usually does not have time for such things; so, the development of geometric imagination in students is carried out with the help of practical activity;
- Working with geometric instruments contributes to the formulation of practical skills in students. Here their feeling and aesthetic activities are considered to be a fundamental. Moreover, working with geometric instruments increases students’ interest;
- Actually studying geometric materials compiles of an imagination which helps students to connect life experience and intuition, different feelings (from the feeling of

having knowledge up to the feeling happy to know it), with non- mathematical spheres and the imagination which is known to a student in routine life (nature, living conditions, the environment, the world, music, dance, applications, carpets, colorful paper and etc.).

The requirements to the created special course are the followings:

1. In studying the mathematical course relying on the informative material.
2. The fundamental of this special course should include one of the leading mathematical ideas.
3. The chosen idea should correspond to primary school.
4. The special course should be professionally valuable for a student.
5. The meaning of the special course should be practically directed.
6. In the special course the connection knowledge with other spheres especially, with the spheres which are not concerned to mathematics should be considered.
7. The meaning of the special course should be important not only for the meaning of factual materials, but also in the methodic-mathematical preparation of a student the intellectual activities, (intellectual operations, the ways of thinking, the ways of intellectual activity), other methodic ways (for giving examples to mathematical conceptions using guide-books, the elements of role-playing, cases of “ or-or” and etc.).
8. In the acquiring the special course the taken preparation should determine the variation system of compositional subjects for students which carries out the aim of teaching, methods, ways, and means.
9. Within the framework of the special course endowment of future primary school teachers with the efficient accomplishment of high-school diploma and master’s degree works should be provided.
10. The professional who wants to establish the special courses should provide the preparation of future primary teachers.

Firstly, in the special course the lack of the proportion of geometric materials is connected with the usage of different ways in teaching it and the importance of developing a creative person. In using geometric materials a child relies on the intuition of understanding the world, his/her subjective experience, the development of objective components of thinking. The objective component of thinking is considered to be the main, and it is used for the progressive development of theoretical discussion. Secondly, connections with the idea of special integrated course, including other spheres of mathematics, such things as imagination, fantasy appear which concern to a child. So, it includes in the theory of changing some problems of the conception, constructive geometry, and non-standard problems.

BIBLIOGRAPHY

1. Resolution of the president of the republic of uzbekistan/On measures to improve the quality of education and development of scientific researches in the field of mathematics / g. Tashkent, May 7, 2020, No. PP-4708.
2. Strategy of action in five priority areas of the development of the Republic of Uzbekistan in 2017-2021. to the Decree of the President of the Republic of Uzbekistan dated February 7, 2017 No. UP-4947
3. A whole program to improve the quality of education, increase the efficiency and practical significance of scientific research in the mathematical sciences in the Republic of Uzbekistan for 2020 - 2023. Tashkent, May 7, 2020, No. PP-4708
4. Assessing Reading, Mathematics and Scientific Literacy: A framework for PISA 2009. OECD, 2009.
5. OECD (2013), PISA 2012 Assessment and Analytical Framework: Mathematics, Reading, Science, Problem Solving and Financial Literacy, OECD Publishing.
6. Keunho Lee. Competency-based curriculum and curriculum autonomy in the Republic of Korea./UNESCO International Bureau of Education. Geneva-2014
7. Mathematics curriculum, Teacher Professionalism, and Supporting Policies in Korea and United States/ U.S. National Commission on mathematics. Instruction. Board of International Scientific Organizations. National Academies Press-2015.
8. Jinho Kim. Mathematics Education in Korea: Curricular and Teaching and Learning Practices. World Scientific-2013.
9. Mathematics syllabuses. Curriculum planning and development division, Singapore Ministry of education. 2015
10. Character and Citizenship Syllabuses. Framework for 21st Century competencies and Student outcomes. Student development curriculum division, Singapore Ministry of education. 2016 .
11. The National School Curriculum, Curriculum and Assessment Guide. CDC-HKEAA Committee. Hong Kong. <http://www.emb.gov.hk/cr>
12. Ginsburg A., Leinwand S., and Decker K., "Informing Grades 1-6 Standards Development: What Can Be Learned from High-Performing Hong Kong, Korea, and Singapore?" American Institutes for Research, 2009.
13. California Common Core State Standards. Mathematics. Electronic Edition. Adopted by the California State Board of Education August 2010 and modified January 2013. ISBN 978-0-8011-1748-8.
14. Governmental program "Barkamol avlod". The decision of the President of the Republic of Uzbekistan. Newspaper "Adolat". Tashkent- year 2010, January, 29. №4 (761), pages 1-2.