

IMPROVING TEACHER TRAINING PRIMARY CLASSES IN TEACHING MATHEMATICS

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ABSTRACT

The article reveals the concept of Improving the professional training of primary school teachers in teaching mathematics.

Keywords: Mathematics, math problems, teacher training, primary classes.

INTRODUCTION, LITERATURE REVIEW AND DISCUSSION

Of great interest to improve the vocational training of primary school teachers is the approach of A.H. Mordkovich to the implementation of the principles he formulated in the methodological system (AMPyshkalo) of teaching students to mathematics, as well as the criteria for developing programs of mathematical courses - compliance with the objectives, didactic isomorphism and minimization. All of the above facts, of course, can serve as a scientific basis for improving the programs of special courses, including the "Mathematics" course at the faculty of training primary school teachers.

The technological approach to the improvement of the university special training of the future teacher of mathematics made it possible to expand the list of those principles that reveal the essence of professional pedagogical orientation of the mathematical preparation of the future teacher at the present stage of development of higher education [1, p. 157].

As A. Nizhnikov notes, "building a model of a methodical system for preparing a modern teacher becomes possible only by following the leading principles," adequate to the concept of the professional development of a future teacher of mathematics.

The system of proposed principles [1, p. 159] includes: the principle of expediency and demand. It is revealed through the system of models: the model of an applicant for a pedagogical university, the model of a student at the end of each academic year of study, the model of a graduate, the model of a teacher-professional. Clarifying this principle, A.I. Nizhnikov points to the need to form the future teacher of mathematical culture, fundamentalization in the study of basic concepts of school and higher mathematics, to strengthen the applied orientation of courses in higher mathematics.

2) The principle of optimizing the teaching system implies coordination of minimization and maximization processes at selection of the volume, content of education and the necessary source link mathematical knowledge; the target function is the mathematical modern teacher competence given by the state educational standard.

3) The principle of the integration of methodological systems of teaching mathematical subjects in the university and the methodical system of teaching in school.

4) The principle of polyphony is revealed through the multilevel complexity of the presentation of general and special mathematics courses for students of the Faculty of Physics and Mathematics; through productive use of information technology; through purposeful expansion and deepening of the mathematical competence of the future teacher.

5) The principle of freedom of choice involves the enrichment of students' independent activities, self-determination in choosing the trajectory of professional development and providing students with the opportunity to receive an increased level of training.

Investigating the content of mathematical education in the higher educational institutions at the present stage of development of our society, N. G. Ovanesov comes to the conclusion that the mathematical disciplines studied at the university are designed to ensure not only the expansion of the mathematical outlook and the development of the student. According to the author, it is necessary to organize the learning process in such a way that the future specialist learns to competently analyze the scientific content of the mathematics course at school and other educational institutions. He must clearly understand the scientific development of the basic concepts and methods of the course, the logical structure of its parts, know the different points of view on the method of presenting its sections and be able to choose the most effective teaching methods.

Professional orientation in training should provide the purposeful formation of the basis of professional skills among students, which, in the author's opinion, are based on the active and deep knowledge of school mathematics, its scientific foundations and methodological support. And active and deep knowledge should be acquired in the process of positive, businesslike, responsible attitude to pedagogical duties and to mathematics (as a science and as an academic subject).

- the principle of logical-psychological orientation in training, under which refers to the relationship and combination of logical and psychological foundations in the learning process, is designed to provide a solution psychological and pedagogical problems of perception and assimilation math knowledge.

- The principle of effective learning provides a solution optimal perception and learning, provides activation of the educational process by a special organization content of mathematical material in a specific discipline, choice of effective forms and methods of training.

From the point of view of the conducted research, the dissertation of M. Pustovoitenko is of interest, in which the ways of realizing the interrelationships of the developmental and teaching functions of education in practical classes on algebra and number theory are considered.

Rightly noting that “the traditional lecture scheme, when the lecturer sets out, and students only listen and write, cannot correspond to the task of developmental education, if only because this training presupposes, above all, a high level of independence of the mathematical activity of students”, the author suggests fill this gap in practical classes. For the successful solution of this problem Pustovoitenko M.V. formulates principles:

- unity of the developing paradigm of lectures and practical exercises.

The effect of this principle is based on reasonable transference.

a certain share of lecture material that has a certain developmental effect and is available for independent study by students for practical exercises.

- the principle of advance, which is expressed through the update necessary knowledge, the solution of problems and the formulation of problem

- questions before consideration of the relevant elements of the theory at lectures;

- the principle of the interrelation of higher algebra with the school course;

- the principle of activity-oriented learning, which is implemented in two aspects: the organization of students' learning activities in practical classes and the preparation of students for professional activities.

The author identifies the intellectual development of students as the main line of vocational training.

The analysis of the principles of professional and pedagogical orientation of the mathematical preparation of the future teacher of mathematics allows you to fully present the ways of implementation of professional-pedagogical orientation in special courses in the preparation of a teacher of mathematics. However, the specifics of training primary school teachers were not adequately reflected in them.

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