PEDAGOGICAL CONDITIONS OF TRAINING FUTURE MATHEMATICS AND INFORMATICS TEACHERS

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Abstract:

Pedagogical conditions for training future mathematics-informatics teachers are given in this thesis. Also, the mastering of new professional competences arising from the demands of the labor market, innovative activity, in a word, the development of professional competence are presented.

Key words: mathematics-informatics teacher, pedagogical conditions, reproductive skills of students, modern technology.

The high professional training of pedagogical staff largely depends on the potential formed in higher education institutions, meeting its educational needs, and the level of professional training. From this point of view, there was a need to fundamentally revise the education system, expand opportunities for acquiring professional knowledge, and train specialists capable of working in new conditions and new modern technologies. The training and education of future teachers is closely related to the deepening of a number of reforms in our country and the development of civil society, the modernization of social and economic aspects, the development of higher education and the process of educating students.

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According to F.M. Zakirova in her research work entitled "Methodical basis of theoretical and practical training of future informatics teachers", "Pedagogue activity and science teacher differ from each other with their own content, i.e. the functional and he expresses the opinion that structural features are distinguished. On the other hand, as a result of the analysis of the scientific methodical literature on informatics, the objective bases of pedagogical activity for the informatics teacher have been highlighted. "The main thing is that there are different views on the basic concept of the word informatics (information, algorithm, computer, program, model, ICT), that is, informatics is a teaching science, a tool, an element of educational management, and education as a new environment". This leaves you with a professional methodical side to the activity of the computer science teacher. F.M. Zakirova, an informatics teacher, highlighted the specific features of professional methodical activity in the conditions of modern informatization.

1. The dynamics of the development of informatics science by the informatics teacher, the expansion of the range of objects of its study, the change of conceptual apparatuses, the regular expansion of topics and methods, which lead to changes, and in the conditions of changes in the methodological systems of teaching informatics works. The rapid development of information and communication technologies allows the teacher to quickly learn the new necessary conditions for personal development.

2. A computer teacher should effectively organize work not only in the classroom (or computer class), but also in modern ICT conditions.

3. Informatics teacher constantly conducts activities on computer labor protection and work safety.

4. The computer science teacher is characterized by algorithmic thinking, which makes his professional activity more effective.

5. The computer science teacher uses pedagogical tools, various collections of practical programs, electronic literature, etc. in his work program, which are constantly updated and improved.

6. The informatics teacher conducts research and scientific-methodical work in the field of introduction of modern ICT tools in the educational process.

"Solving practical problems of methodology as reproductive skills in students, the sequence of transition from creative understanding of methodological problems to research skills is as follows:

• acquisition of necessary knowledge;

• formation of skills at the reproductive level;

• demonstration of activity - as a whole and by elements;

• organization of strengthening skills in simple options (artificial simplification of the task, dividing it into parts);

• organization of independent practice with continuous feedback;

• searchability, transition to a productive (productive, creative) stage;

• organization of various problem situations - solving non-standard problems, appropriate modeling of reality;

• organizing work on mandatory analysis of one's own activity, discussing it in the team.

In particular, to increase attention to the quality of personnel training in pedagogical fields, to have a high level of professional training of future teachers studying in pedagogical fields and specialties, to develop their pedagogical skills, self- it is necessary to develop motivation for professional and personal improvement, as well as mastering new professional competencies arising from the demands of the labor market, innovative activity, in a word, professional competence.

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