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# СТРУКТУРА МЕТОДИЧЕСКОЙ СИСТЕМЫ ОБУЧЕНИЯ СТУДЕНТОВ УЧЕБНЫМ ДИСЦИПЛИНАМ ПРОФИЛЬНОГО ЦИКЛА В УСЛОВИЯХ ПРОБЛЕМНО-МОДЕЛЬНОГО ПОДХОДА THE STRUCTURE OF THE METHODOLOGICAL SYSTEM OF TEACHING STUDENTS OF ACADEMIC PROFILING DISCIPLINES IN TERMS OF PROBLEM-MODEL APPROACH

**Аннотация.** В данной статье предлагается анализ составных частей методической системы обучения студентов педагогических специальностей дисциплинам профильного цикла. Определена совокупность компонентов данной системы, выделены принципы и методические условия. Выделены критерии отбора содержания методической системы обучения с позиции проблемно-модельного подхода как инновационного подхода в образовании.

**Abstract.** The analysis of the set of components of the methodological system of training of the students of pedagogical specialties in the profiling disciplines is defined; the principles and methodological conditions of the system are highlighted. The criteria for selecting the content of the methodological system of training from the position of the problem-model approach as an innovative approach in education are highlighted.

**Ключевые слова:** проблемно-модельный подход, проблемное моделирование, инновационные технологии и подходы в обучении, научно-методическая система, профессиональное образование.

**Keywords:** problem-model approach, problem modeling, innovative technologies and approaches in training, methodological system, professional education.

The methodical system of training is an ordered set of interconnected and interdependent methods, forms and means of planning and carrying out, control, analysis, correction of the educational process aimed at improving the efficiency of training of students. The methodical system only then functions if it is defined by the purposes, tasks and the maintenance of training if it includes planning, control, the analysis and adjustment of educational process. Methodical system consists of the same components as the pedagogical system; the difference is that each of them has acquired a methodical function [1, 3].

We define a methodical system of teaching of pedagogical specialties students principle subjects as a set of interrelated components: professionally significant goals; content, reflecting the fundamental methods of pedagogy, in accordance with the qualification requirements of the pedagogical industry to prepare a professional teacher; means, organizational forms and methods of teaching on the basis of problem-model approach, emerging and developing in the modern educational environment [4, 6].

The structural components of the scientific and methodological system of teaching students of pedagogical specialties principle disciplines in the context of the problem-model approach of the system are the following:

- 1. Learning objectives.
- 2. Syllabus.
- 3. Methods and techniques of training.
- 4. Training resources.
- 5. Forms of training.

The problem-model environment should be flexible, easily modifiable, expandable, easy to manage and maintain. Organizational and technological basis of the problem-model environment. Most publications on the problems of designing the components of the problem-model environment are reduced to the discussion of various options of the use of new pedagogical technologies, etc. As a rule, out of the field of view of the authors is the content of the problem-model environment for the specialty, i.e. information of educational, methodical nature, as well as information used to manage learning [2]. We believe that the organizational and technological basis of the problem-model environment is a set of technologies, methods and tools of the problem-model approach in order to regulate and improve the educational process.

# Functional structure

The functional structure of the problem-model environment is based on the integrated use of traditional, information, module – rating technology and technologies of the problem-model approach. It implements the following types of training activities:

- professional-oriented dialogue between teacher and student;
- continuity and completeness of educational information organization of the educational process on the principles of problem-model approach gives it the quality of openness, mobility and flexibility;
- accumulation of information containing professionally significant basic and specialized knowledge, including the actual phenomena in the teaching industry, the transfer of a sufficiently large amount of information presented in various forms;
- openness of control processes (including self-control) over the results of educational activities with subsequent correction and self-correction.;
  - "phasing" of activities from diagnosis-analysis to diagnosis-evaluation.

### Methodical conditions

Let's define the methodological conditions for the successful implementation of the problem-model approach in teaching the disciplines of the principle subjects cycle:

- 1. Organization of independent activity of students for successfully capturing of the theory through practice.
- 2. The integration of basic and general disciplines and principal disciplines among themselves is a way to update the existing knowledge, skills and ways of working on separate disciplines.

# Learning objective

The main purpose of teaching students, which provides a methodical system in terms of problem-model approach – to teach to understand and identify

common patterns in pedagogical and language professionally important tasks, the ability to find the necessary information to simulate future professional activities.

Content

According to the concept developed by Lerner I. Y. [5], the formation of the learning content is a multi-level process of designing and constructing this content, based on the pedagogical understanding of the social mandate and the activity nature of capturing social experience. Methodological guidelines for the selection of content are the system and personal-activity approaches [5].

The system analysis of the content of teaching disciplines of the profile cycle, allowed to identify and formulate a number of important principles that determine the theoretical aspects of the formation of the methodological system of teaching principal disciplines of students of pedagogical universities in terms of problem-model approach:

- 1. The principle of goal-setting. The teacher together with the student formulate the learning goal and plans learning activities to achieve it.
- 2. The principle of unity of elements' relations of the methodical system of training. The components of the methodical system of training are interrelated and interdependent: changing one of them necessarily requires changing the other.
- 3. The principle of functional completeness of the methodical system of education. Implementation of the methodical system of training in the conditions of problem-model approach is possible if its components (goals, content, methods, forms and means of training) are simultaneously components of the problem-model subject environment.
- 4. The principle of openness of functional and methodical actions of methodical system. Everything that is done in the learning process should be clear, logically sound and informative for students and teachers.
- 5. The principle of objective evaluation of the final result is one of the main underlying educational technologies. Only when this requirement is completed productive control and correction, search for ways of control and correction of mistakes appear.
- 6. The principle of continuity and completeness is the consistency of not only the content of training, but also the model, forms of educational activity in the organization of classroom and independent activities of students. At each level of presentation, perceptions, knowledge, skills are expanded and deepened. Achieving the goal is obligatory, and the transformation of the content of education is necessary to achieve the goal in the interests of the student. Classroom activities of students should be coordinated with independent activities and it should ensure the satisfaction of needs and interests of the subjects of education.
- 7. The principle of flexibility of means, methods and organizational forms of technology implementation into training. A wide range and variety of tools, methods, organizational forms and types of technologies ensure the full value of the educational system, provides freedom of creativity, initiative and activity in the context of the problem-model approach.
- 8. The principle of optimization requires in each case the choice of the best option for the content of funds, forms, methods of implementation and op-

eration of technologies, time, effort, degree of difficulty, science, creation of optimal conditions for the activities; skillful manipulation and regulation of actions; operational control and correction of activities.

We will formulate the criteria of selection of the content of the methodical system of training supplemented by us from the position of the problem-model approach:

- 1. Criteria of integrity and continuity, meaning that the study of disciplines of basic, general and profile cycle is a single link in the training of the future teacher.
- 2. The criterion of compliance with the learning objectives. The content of the disciplines of the profile cycle should be considered in the system-forming aspect.
- 3. The criterion of scientific character in combination with accessibility, certain strictness and systematic presentation.
- 4. The criterion of continuity. Application of the problem-model environment in the pedagogical university should ensure a smooth transition from the fundamental level of presentation of the material to practice, i.e. to prepare the student for the study of professional and special disciplines, including specializations and electives.
- 5. The criterion of unity of the content of training. The content of training of separate subjects in total has to provide formation in consciousness of the future teacher of the complete scientific picture serving as a scientific basis of its subsequent practical professional pedagogical activity.
- 6. The criterion of timing. In accordance with this criterion, the content of training should include not only those sections of specialized disciplines that are important for professional activity now, but also those regarding which there is a reason to think that they will be in demand in connection with new technologies in the professional activity of teachers.

Considering the choice of teaching methods, we will keep in mind that in any act of educational activity there are several methods at the same time; speaking about the use of a certain method, we mean its dominant role at each stage of the educational and cognitive process.

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