

REQUIREMENTS FOR INFORMATIZATION OF PREPARING FUTURE TEACHERS FOR PROFESSIONAL

Annotation: *The article discusses the issue of scientific and methodological substantiation of the requirements for the informatization of the educational process in the preparation of future teachers for professional activities. This article can be used by those who are dealing with the problems of improving the qualifications of future specialists.*

Key words: *Professional activity; promising teachers; informatization; requirements; studying process; scientific and methodological; masala; justification; collection of information; object of study; indicators; supply; Information system; database; formation; Information support; methodical; ergonomic; improvement.*

Introduction: This article also specifically aims to scientifically and methodically substantiate the process of informatizing the educational content for preparing future teachers for professional activity. To address this issue, it is necessary to collect data on the research object, convert it into information form, and prepare it for the informatization of the educational process in training future teachers for professional activity [1–5]. This requirement mandates that the informatization of the educational process for preparing future teachers for professional activity be carried out on the basis of a strict algorithmic sequence. We implemented this in our research in the following order:

1. Collection of information on the research object. This involves gathering information about the research object and organizing it into logical sequences based on the research objectives, tasks, and the working hypothesis. To this end, the specific characteristics of the research object—namely the process of preparing a new BTTO for professional activity—are first analyzed from the perspective of problem formulation, and then the research is conducted in the following

sequential stages: The significance of this stage lies in the fact that a deep analytical study of the research object can serve as the initial functional basis for defining the research strategy and substantiating the working hypothesis. The materials at this stage also serve as an important didactic foundation for learners to acquire new knowledge during their professional preparation processes, as well as, this stage also serves as an important foundation in the process of developing an intellectualized training system for preparing BTTO for professional activity (This is discussed in detail in Section 2.3 of this research.)

2. Creation of a database on supplies. This addresses the creation of a database on forming a system of supplies for preparing BTTO for professional activity, with a focus on the following supplies:

- Data on legal and regulatory documents is prepared;
- A collection of information on regulatory and legal documents is prepared;
- A collection of information on forming the informational support is prepared;
- A separate package is prepared for forming the technical support;
- Information on software is prepared;
- Information on organizational support is prepared;
- A collection of materials for methodological support is prepared;
- A collection of information for ergonomic support is prepared, and so on;

These noted supplies serve as an important didactic foundation for improving the scientific and methodological support for preparing BTTO for professional activity. Therefore, it is necessary to develop a system of supplies to enhance the preparation of BTTO for professional activity. It should be emphasized that these noted provisions are important not only for studying individual subjects but also for studying groups of subjects in their interrelationships. Using such a system of support to conduct the educational process creates broad opportunities to improve its structure and, in turn, constitutes an innovative educational technology.

3. Creation of a database on scientific and methodological resources. This addresses the development of a database concerning the structure of scientific and

methodological resources for preparing BTTO for professional activity, with a strong emphasis on the following resources:

- pedagogical-didactic support;
- pedagogical-methodological support;
- pedagogical-informational support;
- pedagogical software;
- programmatic-methodological support, and so on.

These noted items are components of the scientific-methodological support, and one of their main features is that they provide broad opportunities to develop an informational educational environment for mastering a specific subject. It reflects the content and essence of the subject to be mastered, as well as all related information. This includes the following:

- A list and outline of topics;
- Theoretical information for lectures and its block-by-block presentation according to the course outline;
- For practical and laboratory classes, the sequence of questions and tasks that take into account the formation of the learner's knowledge, skills, and competencies; the system of practical assignments and exercises;
- Laboratory sessions and their procedural flowcharts and assignments;
- Instructions, guidelines, and the like for solving problems and exercises, as well as for completing creative assignments, laboratory and course projects.

Detailed information on the components of the aforementioned scientific and methodological support is provided in the “First-Category Training” section of the system for creating RTN's scientific and methodological support for preparing BTTO for professional activity.

4. Forming an information bank on the stages of preparation. This addresses the issue of creating an information bank on the stages for improving the scientific and methodological support for preparing BTTO for professional activity, and initially, the scientific and methodological support for preparing BTTO for professional activity -methodological support for the stages of professional activity

preparation is scientifically and methodologically substantiated in the following sequence:

- preparation stage;
- formation stage;
- justification stage;
- implementation stage.

A database is created for each of these noted stages. Their structural appearance is as follows.

$$\text{Here: } \mathbf{IMB- I MB} = \{(\mathbf{T_{1i}})(\mathbf{SH_{2i}})(\mathbf{A_{3i}})(\mathbf{J_{4i}})\} \quad (1)$$

An integrated database developed to enhance the preparation of BTTO for professional practice.

$\mathbf{T_{1i} (i=1,4)}$ - This is a database for the preparatory stage, which is used in all four stages of preparing BTTO for professional activity.

$\mathbf{SH_{2i} (i=1,4)}$ - This is a database for the shaping stage, which is used in all stages of preparing BTTO for professional activity.

$\mathbf{A_{3i} (i=1,4)}$ This is a database for the justification phase, which is used by the BTTO at all stages of the KFT.

$\mathbf{J_{4i} (i=1,4)}$ - This is the database for the implementation phase, from which the BTTW is used at all stages of the KFT.

An information bank is created from these registered databases. An information bank is the collection, for a specific purpose, of information on a particular area of human activity or scientific knowledge, a collection of technical, software, and algorithmic languages and their organizational tools, designed for the specific purpose of collecting, storing, systematizing, and making information publicly available in a particular area of human activity or scientific knowledge.

The primary purpose of the information bank we are developing is to process data on BTTO related to KFT and to use it to improve the scientific and methodological support for BTTO in KFT, its primary function is to implement targeted use of the information support system in conducting the BTTU-KFT

process and to monitor its effectiveness. The information bank developed for the BTTO-to-KFT process provides extensive opportunities for both supplying data on the process under consideration and for creating an algorithmic system to control the flow of processes. They can also be widely used to create the information base for the scientific and methodological support of BTTO in KTF and the professional intellectualized systems based on them. Thus, in the RTN, the information bank is consulted at every stage of enhancing the scientific and methodological support of BTTO in the CFT, and on that basis, innovative educational technologies are developed. These, in turn, provide broad opportunities to ensure that BTTW in the RTN achieves one of the optimal variants of the CFT.

Conclusion: Informatization of processes in evaluating results. This addresses the issue of informatizing the process of assessing the outcomes achieved. To do this, the learner's acquired knowledge and skills are identified. It is carried out in the following sequence: the final assessment of the learner is conducted according to this recorded sequence. A special form is developed for this purpose. In addition to these questions, it includes the results of acquired practical skills and competencies, and the total score from the form is broken down by acquired knowledge, skills, and competencies. These acquired results are compared with the requirements of the DTS to determine pedagogical effectiveness. The significance of this component is that it provides a didactic and informational basis for developing criteria to determine and assess the pedagogical effectiveness of improving the scientific and methodological support of BTTO through KFT.

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