

**IMPROVING THE ELECTRONIC SOFTWARE FOR THE DEVELOPMENT OF  
CREATIVE COMPETENCES OF STUDENTS OF FUTURE TEACHERS**

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**Abstract:** The content of the article is that it provides full information about the improvement of the electronic software for the development of creative competences of students of future teachers.

**Key words:** Modular, intellectual, educational process, theoretical views, creative thinking, pedagogical, didactic projects.

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Scientists of a number of developed countries are paying special attention to the problems of modular education. In particular, in the article "Implementation of the Experimental Model of Future Teachers' Media Education Competence Formation" published by Maksim Imeridze on pages 102-106 of the "Science and Education" magazine, issue #1, 2016, on the "WEB of science" website. Approaches and theoretical views on expanding the possibilities of using media technologies in the modular training of young teachers and increasing the effectiveness of teaching on this basis are described.

Today, scientific information is becoming a pedagogical tool that contributes to the development of an intellectually developed society and forms a creative thinking person. Also, most of them are losing their relevance in the global information field or are being regularly updated. One of the main reasons for this is that the flow of information is being rapidly updated due to the development of science and technology and cultural and spiritual development. This increases the need to select and present educational information, taking into account the possibility of intellectual development of future teachers. As a result, it is necessary to form the motivation necessary for future teachers to independently find and assimilate information in the educational process. This, in turn, requires setting heuristic tasks in front of future teachers, helping them to carry out the necessary research so that they can fulfill them independently. The main directions of educational activities in the educational process are that future teachers can independently find and intellectually accept the necessary information, and perform the necessary educational actions.

This, in turn, requires future teachers to have the ability to approach the educational process with responsibility, to complete problematic assignments in cooperation. In this process, it is necessary to use problematic, heuristic forms of teaching. Implementation of an active approach to the process of intellectual development of future teachers with the help of modular teaching technologies allows turning their acquired knowledge into competencies. It should be noted that students with different levels of intellectual development study in the same class. That is why teachers are divided into the following groups according to the level of intellectual development and knowledge acquisition:

1. Intellectually developed, future teachers who creatively master educational materials.
2. Future teachers who are intellectually moderately developed, who master the educational materials in one go, and who fulfill all the tasks of the teacher without a word.

3. Future teachers who are intellectually insufficiently developed and do not fully master the educational materials.

That is why it is of special pedagogical importance to ensure the intellectual activity of all future teachers in the classroom. Modular technologies have a special pedagogical value in activating the intellectual fields of future teachers. Within the framework of these technologies, future teachers will have the ability to actively acquire knowledge, integrate it into practical activities, search for new knowledge with their help, and apply it in different situations. As a result, they have the opportunity to show heuristic activity, show their capabilities, creative activity and use activity algorithms.

Modular teaching technologies ensure that educational materials are presented to future teachers in blocks. Within the educational subject, thematic blocks are selected in connection with the curriculum and their content is enriched. The content of these blocks is enriched by the teacher with the help of secondary didactic projects. In this, teachers rely on their experience of creative activity and the level of intellectual development of future teachers. It is important for teachers to coordinate the educational materials presented to future teachers during the lesson, to ensure the connection between them, and for these educational materials to be able to guide future teachers to their intellectual development. In the framework of modular teaching technology, future teachers will be able to master the topics of the curriculum, as well as to independently find and master educational materials that serve to develop their intellectual spheres.

Such educational materials should be structured in a modular way. To do this, it is required to provide knowledge algorithms to future teachers. Because modular teaching technologies provide future teachers with independent learning, and provide for the gradual organization of the content of educational materials and the educational process. Each module presents the content of the educational subject at three levels:

- a) complete;
- b) shortened;
- c) in deepened forms.

Educational materials can be presented at all three levels at the same time. Textbook authors and teachers should use the following forms:

- Presentation of educational materials to future teachers in the form of various symbols, drawings, illustrations;
- Presentation of educational materials in verbal form, in this process it is envisaged to present educational information to future teachers in the form of a lecture;
- It is intended to present educational materials to future teachers in the form of various model drawings, diagrams.

Educational modules represent an independent component of educational material. Accordingly, the training modules include the following parts:

- Clearly formulated learning goals, that is, a set of learning goals;
- A bank of educational information presented to future teachers, which in turn includes secondary didactic projects presented to future teachers;

- Didactic tools that serve to develop the intellectual spheres of future teachers;
- Practical exercises and didactic situations aimed at forming basic competencies in future teachers;
- Such as control works that serve to determine the mastery of the module by future teachers.

Among these are the criteria and indicators that serve to determine the development of the intellectual spheres of future students as a result of mastering the educational modules. In order to control the current, intermediate and final intellectual development of future students as a result of mastering the educational modules, heuristic tasks are set before them.

One of the important tasks of modular teaching technologies is to create favorable conditions for future teachers' independent research, creative activity, and intellectual potential. As a result of the organization of the educational process with the help of modular teaching technologies, the intellectual spheres of students develop and their opportunities to understand educational goals expand. That is why the intellectual fields of future teachers develop rapidly in the educational process organized with the help of modular teaching technologies.

**List of used literature:**

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