TECHNICAL AND TECHNOLOGICAL FEATURES OF SCHEMATIC VISUALIZATION

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Abstract: The educational process of higher education consists of a set of basic educational modules that ensure the formation of relevant competencies and knowledge, skills and abilities in practical activity or scientific field. Visualization of educational materials in the form of information in the educational process is one of the important factors affecting the quality of education.

Keywords: interactive methods, teaching ways, technological features, schematic.

Introduction

In the direction of information, the educational features of visualizing educational materials for the selected field of activity (natural sciences, technology, humanities) are revealed and help to choose visual elements of educational materials in accordance with the specific characteristics of the future activity.

Therefore, the following algorithms are used in the presentation of educational materials:

- adaptation of educational materials to the specific characteristics and advantages of the educational subject;
- image coding of educational materials (reminiscent symbols, color, shape, location, fonts, etc.);
- modeling the content of educational and professional activities;
- visual use of educational materials and other professionally relevant elements and so on.

Main Part

Visualization of educational materials (for example, drawings of equipment, diagrams, technical characteristics of objects, various details of components, etc.) is characterized by taking into account the models, processes, events, technical and technological features of schematic visualization demonstrated in the activity. That is, in order to reflect the educational materials presented in the first chapter of this research work (tables, graphs, 64 formulas, classification, etc.) presented for visualization of the educational materials in the specialty, it is preferable to reflect them in separate aspects, and the actual presentation of the educational materials (for example, exception to the general rule, when demonstrating informal application of the law, etc.) are used only in some aspects.

Visualization of educational materials for natural sciences is based on the elements of visual materials of this subject [1] and is carried out within the subject specification. The use of elements of visual educational materials should not contradict established scientific approaches and should be determined by the direction of scientific activity. When describing the visualization, it should be done by clarifying the content parameters of the educational subject in order to study its review at the level of the academic subject in a functional direction. A formalized description of the proposed content in terms of visualization:

a) defines specific forms of organization of education in the functional direction;

b) defines the methods of organizing cognitive activities in the morphological direction;

c) reflects the specific characteristics of the educational tools used in the information direction.

We clearly show visually the algorithm of transition to the next level of the formalized description of visualization, which is considered at the level of educational science. A formal description of visualization of educational materials at the level of educational subject and educational process can be schematically presented.

Conclusion

Thus, when using digitized programs, first of all, by gradually teaching students to use the program:

- preparing to work with the digitized program;
- establishing a system of preparing independent presentations by working with digitized software tools;
- demonstration of student creativity is achieved. In the course of our research, it was proven that visualization of educational materials in higher education is the leading condition for student knowledge acquisition.

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