## A MODEL FOR IMPROVING THE PROFESSIONAL TRAINING OF STUDENTS USING COMPUTER DESIGN TOOLS

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## **Abstract**

This article talks about the methodological foundations of improving the information and communication potential of future vocational education teachers in the current information age based on computer design tools. The model of the process of improving the information and communication potential of future vocational education teachers with the help of computer design tools includes the following components: motivational-value, substantive, operational-management, reflexive-resultative.

**Keywords:** teaching, computer-aided design, improvement, professional education, information-communication training, motivational-value, meaningful, activity-management, reflexive-resultative, interdisciplinary model, information-design assignments.

Despite the large number of scientific and research works devoted to the professional training of future vocational education teachers, the organization of work on improving the information and communication training of vocational education teachers on the basis of computer design tools has not yet been sufficiently revealed. In pedagogical literature, the term "preparation" is understood as both a process and a result.

According to M.V. Edrenkina [1], professional training is the process of acquiring scientific knowledge, skills, qualifications and necessary personal and professional qualities and covering its result. S.S. Salavatova suggests that the concept of "professional training" should include the formation of professional interests, views, imaginations and behavioral standards corresponding to them [2; -146- p.].

In each of the above-mentioned definitions, emphasis is placed on procedural, personal and substantive (knowledge, competence, skills) directions. In the course of our research, we paid more attention to the study of procedural and substantive aspects of professional training, without denying the importance of forming personal qualities in the training of highly skilled professionals.

Thus, in our opinion, professional training is the process and result of formation of a system of special knowledge, skills and abilities that allow to perform work in a specific field of activity. Vocational-pedagogical training means the process and result of formation of knowledge, skills and abilities that enable teachers of network subjects to effectively carry out their professional activities.

Computer technology of teaching relies on matching the computer to individual human abilities. It is distinguished by the possibility of optimal management of the training process,

the fact that this type of training is in the form of universal communication, psychological comfort, and unlimited training.

It is an independent learning tool for gifted and highly curious students. Computer-aided learning has many advantages:

- ➤ the time for students to develop certain skills is reduced; the number of practice tasks increases;
- the pace of students' work accelerates, as a result of requiring active control by the computer, the student becomes an educational subject;
- there will be an opportunity to model and directly demonstrate processes that are difficult for students to observe and observe;
- if you use communication tools, it becomes possible to provide the lesson with remote resources;
- > communication with the computer takes the character of a didactic game, and with this, students' motivation for learning activities increases, etc.

For this reason, in all economically developed countries, as well as in the Republic of Uzbekistan, research works in various directions are being conducted to solve the problems of computerization of education.

Design automation means that the design procedures and operations of the design development process are carried out in close communication between the designer and the computer.

Computer-aided design is a set of automated design tools associated with a design organization or team of professionals performing automated design.

The main task of computer-aided design is the automated design of a specific intended object or technique and its components.

As a conceptual basis for modeling the improvement of information and communication training of future vocational education teachers based on computer design tools, we chose the model-competence approach and logical-information approaches that increase its effectiveness.

The model-competency approach in vocational education is a model for organizing the educational process, in which the main goal of education is the formation of professional competencies in future specialists. As a means of achieving it, the model structure and content of vocational education is used.

The model of the process of improving information and communication training of vocational education teachers based on computer design tools includes the following components: motivational-value, substantive, operational-management, reflexive-resultative. Each component has its own purpose, tasks, content, and implies the use of certain methods and tools in the educational process.

Computer (new information) technologies of education is the process of preparing and transmitting information to the learner, and the means of its implementation is the computer,

that is: formation of the learner's ability to work with information, development of communicative abilities, preparation of the person of "information society", It is to provide students with enough information at the level of their ability to learn, to form research skills and optimal decision-making skills in students.

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