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Electronic Textbook "Engineering Graphics" as a Training Material Contributes to the Implementation of All Aspects of the Student's Educational Activity

Key words: *engineering graphics, didactics computer training system, training program, educational activity*

Annotation: *electronic textbook "Engineering Graphics" was created with the main principles of didactic training and especially the impact of the above e-textbook as the training program, in this case it is lies in the fact that it is aimed to the realization of all parts of student's learning activities which includes operational content (mental actions) and motivational (goals, motivations, interests) activities.*

In terms of didactics computer training system can be represented as a system of training programs and ways to implement them. The main function of computer training is to manage learning activities of students. It is implemented through training programs. Independent work of students in the presence of a teacher, who can give timely advice. The output of the precarious situation relates to the organizational form of work in the computer lab.

It is known that the foundation of the training program system comprise some programs, which are subject to a number of psychological and pedagogical requirements in terms of achieving the goals of learning through diversity training actions with regard to the provisions of pedagogy, psychology and didactics; as well as stimulation of the high activity of the learner, providing developmental effect of training and its individualization, conducting pedagogical orientation of the dialogue with the possibility of modifications and adjustments.

The basis of the training program is a learning task. With its formulation we must know its essential difference from cognitive and production problems. The result of learning task is important only in unity with the method of achieving this result, but in terms of achieving educational goals, especially as a graphic statement of the problem can vary a great

variety. The task of teaching is to provide a transition from the particular to the general, in the assimilation of the essence of geometric method for solving a specific example and informed of its use in other contexts.

In developing scenarios and their software should be considered basic didactic principles:

- scientism (the level of presentation, terminology, language and rigor of evidence)
- systemic (finished threads and themes within the relationship between the individual themes of discipline)
- sequence (from simple to complex), accessibility (ease of formulation, presentation of information granularity)
- visibility (the use of drawings, illustrations, flashing images and other service capabilities of computers)
- connection with practice.

Based on the definition of work experience in software development we can distinguish several types of training programs for each topic of the course: Informational technical programs (ITP1), Interactive training program (ITP2), Problem solving program (PSP), Program for controlling (PC).

Students' work in the computer lab consists of two phases: preparing for the sessions of the program ITP 1 and ITP2 and individual work on the lesson of the programs PSP and PC.

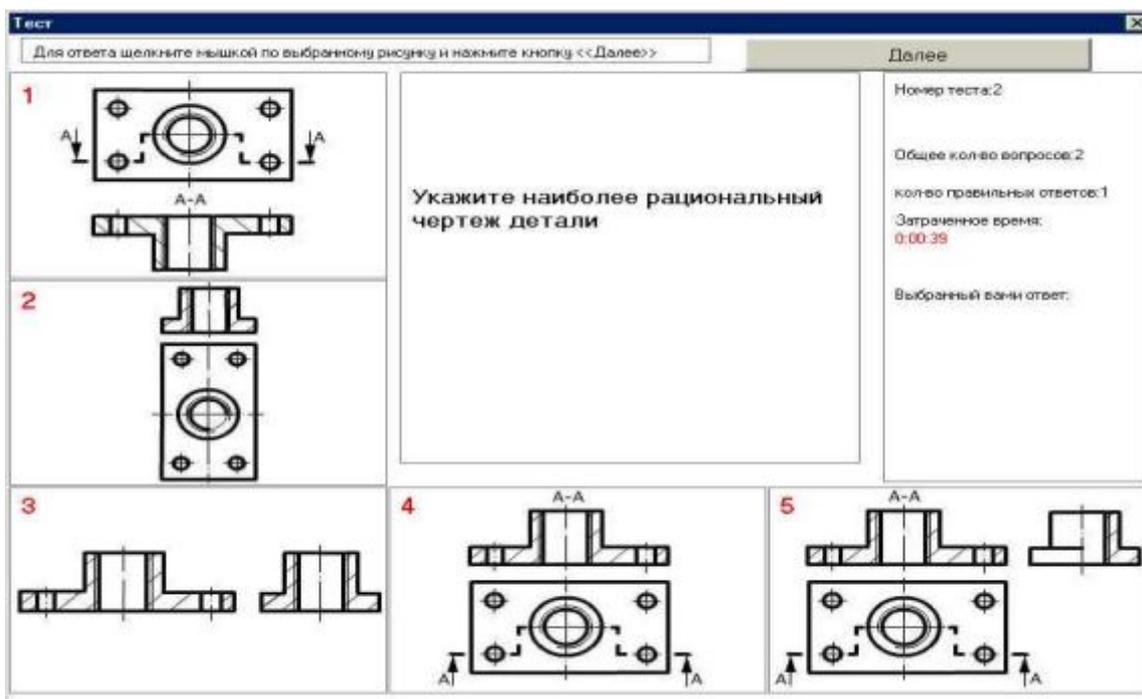


Figure 1

Information-theoretical programs contain a statement of individual sections of the course, they are dissected into pieces and provided with illustrations and emphasizing certain provisions. We offer ITP for the students of technical specialties South Kazakhstan State University named after M.