

Tsvirkun Lyudmyla.

DIDACTIC MODEL OF THE FORMATION OF THE DESIGN-AND-ENGINEERING COMPETENCE IN THE GRAPHIC PREPARATION PROCESS

A didactic model of the formation of design-and-engineering competence of future engineers in the graphic preparation process that combines four interrelated components: target, formation, diagnostics and effect is presented in the paper. The author notes that the use of pedagogical methods and techniques will facilitate the dialogue between teacher and student and effectively influence the process of consolidation of theoretical knowledge of program material for practical and laboratory classes. Therefore, in the process of teaching graphic disciplines it is advisable to use the problem method of the material presentation combined with partial searching method. In view of this, discussion should be used as a means of collective solving of teaching-cognitive tasks that helps to activate professionally oriented communication of future engineers. It is indicated that information technologies and advanced graphic programs are the effective means of increasing technological effectiveness of the graphic preparation process and they contribute to motivation to learn and develop spatial representations. It was found that a unified approach position in the didactic model: competence, system, person-oriented, contributes not only improving the competencies but also the formation of personal and professional qualities of the future engineer.

On the basis of certain criteria (motivational, cognitive, personal and effective) and indicators components of competence formation in learning graphic disciplines: cognitive-informative, operationally effective and social and communicative are identified. The attention is focused on the fact that the developed didactic model provides the intellectual foundation of cognitive activity in the process of learning graphic disciplines according to the educational and professional requirements; the acquisition of the knowledge, skills and practical skills to analysis, synthesis, specification and generalization of educational information by future engineers; activation of the potential for development of the individual capable of enrichment and growth of his educational potential; initial professional development of design-

and-engineering competence of the future engineer.