Freyman Vladimir I.

Candidate of Technical Sciences, Associate Professor, Deputy Head of Automatics and Teleautomatics Department, Perm National Research Polytechnic University, Perm.
E-mail: vfrey@mail.ru

DEVELOPMENT OF METHODOLOGY FOR DESIGNING TESTABLE COMPONENT STRUCTURE OF DISCIPLINARY COMPETENCE

Abstract. *The aim of the study* is to present new methods of quality results assessment of the education corresponding to requirements of Federal State Educational Standards (FSES) of the Third Generation developed for the higher school. The urgency of search of adequate tools for quality competency measurement and its elements formed in the course of experts' preparation are specified.

Methods. It is necessary to consider interference of competency components such as knowledge, abilities, possession in order to make procedures of assessment of students' achievements within the limits of separate discipline or curriculum section more convenient, effective and exact. While modeling of component structure of the disciplinary competence the testable design of components is used; the approach borrowed from technical diagnostics.

Results. The research outcomes include the definition and analysis of general iterative methodology for testable designing component structure of the disciplinary competence. Application of the proposed methodology is illustrated as the example of an abstract academic discipline with specified data and index of labour requirement. Methodology restrictions are noted; practical recommendations are given.

Scientific novelty. Basic data and a detailed step-by-step implementation phase of the proposed common iterative approach to the development of disciplinary competence testable component structure are considered. Tests and diagnostic tables for different options of designing are proposed.

Practical significance. The research findings can help promoting learning efficiency increase, a choice of adequate control devices, accuracy of assessment, and also efficient use of personnel, temporal and material resources of higher education institutions. Proposed algorithms, methods and approaches to procedure of control results organization and realization of developed competences and its components can be used as methodical base while designing the computer-assisted system for educational process management and quality supervision of graduates' competences.

The scope and role of independent work of students have considerably increased according to Federal State Educational Standards (FSES) developed for Highest Vocational Education. The described approach to measurement of components development quality of disciplinary competencies can form base for creating the effective tool set of students' self-assessment.

Keywords: testability designing, component structure, element of a disciplinary competence, test, diagnostic table, control iterative method.

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