

Experimental analytical model of conditions and quality control of vocational training of workers and specialists

Masalimova A., Chibakov A.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2016 Masalimova and Chibakov. The relevance of the study problem is caused by the transformation in professional education on achieving international standards, increasing requirements to the quality of training skilled workers and mid-level professionals, preparing of students for successful employment in high-tech production and well-developed services. The purpose of the article is to develop models of effective organization and quality control of vocational training of workers and specialists on the basis of objective and reliable quantitative and qualitative indicators by using mathematical and statistical methods. The leading method to the research of this problem is analytical modeling, which allows to systematically scrutiny the dynamic processes of professional and personal developments of students in real conditions of theoretical and practical training. At this stage of the studying it can be stated that the proposed model of conditions and quality control of training skilled workers and mid-level professionals have received confirmation of effectiveness. A set of terms and indicators has been developed as instrumentation: percentages of time; individual coefficient and performance indicators by main types of training activities; total individual performance indicator; theoretical and real individual indicators of the number of assessments; GPA; individual coefficients considering attending the additional courses and activities, participation in professional competitions and effectiveness of this participation; integrated individual (group) indicator of the quality of learning; individual (group) rating. The proposed model provides the purposeful and systematic formation of General and professional competences of students. Analytical model conditions and the quality control of training of workers and specialists are tested in educational institutions and designed for practical usage of teaching staff of educational institutions to predict future achievements of professional learning, obtaining intermediate and final analytical results and making timely adjustments to the educational process.

Keywords

Competence, Professional development, Professional education, Theoretic and practical training