

Competency

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4 Management Model of the Regional Educational Systems

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The regional education system structural analysis is carried out and the innovation activity model is formalized. The developed model is regarded as a fuzzy system where the balanced scorecard is used as an input data. Using fuzzy logic under uncertainty conditions helps to extend the capabilities of socio-economic systems traditional management models. It helps while making adequate decisions about the feasibility of various innovative projects implementation in the educational space. The structure of fuzzy inference hierarchical model of educational institutions performance evaluation is developed. It permits to implement a methodology of innovation management in the form of an expert system. The proposed expert system allows the decision-maker to objectively evaluate the effectiveness of innovation activities carried out within the innovation platform and also make timely operational and strategic decisions on its management

Key words: regional education system, innovative activity management system, fuzzy system, fuzzy inference model, innovation platform

10 How to Improve Research and Teaching Staff Academic Activity?

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Stimulation of academic activity should not rely only on the policies of the University, but also be based on the legal basis and scientific recommendations. The publication contains the set of legal justification tasks for such stimulations. Ways of their effective solutions are given and the existing systems analysis of research and teaching staff academic activity expert evaluation is carried out. It is obvious that there are significant disadvantages of such systems. Some recommendations on their improvement are presented. Changes of these systems to the new principles of functioning are predicted.

Those universities that create a fair incentive system will be successful. One of the key elements of such a system is an expert evaluation subsystem. It should be open, clear and representative. Authoritative, anonymous and bureaucratic expert systems of the XX century are not so up-to-date

Key words: academic activity, stimulation, scientific investigation, expert evaluation, legal framework, open systems, clarity, expert anonymity

16 The Essence of Active Learning and Conditions of its Implementation in Pedagogical High School.

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Active learning is distinguished from the traditional (explanatory) by a number of peculiarities. The main drawback of traditional education is the gap between the students requirements, and knowledge that will be required from their real professional activity. Active learning is based on problem-based learning ideas. Problematic situation characterizes a certain psychological state of the subject that arises during the execution of such a task that requires mastering (absorption) of new knowledge about the subject, methods or conditions of its execution. Mastering or the opening of the new coincides in this case with such a change in the subject's mental state that constitutes microstage of its development. Active learning methods cover all types of classes. In this study, the concept of active learning for the complex designation of the objective, contents, forms and

methods of pedagogical universities students' active learning activities is used. Thus, the basis for active learning is based on the reproduction of one or another degree of the processes' adequacy occurring in a real-world educational system and their modeling. In the classification of active learning methods the degree of the students' activation or the nature of the educational-cognitive activity is taken into account. So, there are differences between imitating active learning methods, built on imitation of professional activity. All other methods are not imitative (discussions, press conferences and other). In turn, imitative methods are divided into gaming and non-gaming, the first includes a variety of games, game design, etc., the second includes the analysis of concrete situations, solving situational problems.

Key words: active learning, traditional training, simulation training methods, unimitated training methods, lectures, business games, cognitive activity stimulation methods

24 General Cultural Competence of Land Management Bachelors Reconciliation Training.

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As it is known, it is very important to develop general cultural and professional competences to adapt graduates for their future profession in the market economy. However, in the Federal state educational standard (FSES) on higher vocational education for the training 120700 Land management and cadaster (bachelor qualification), approved by the order of Ministry of education and science of Russia dated November 18, 2009 No 634, the competences that would enable young professionals to effectively resolve land disputes and conflicts arising in the course of their professional activities are not formulated. A study to determine in the students of this speciality the level of reconciliation competence formation and ability to apply this knowledge is undertaken. The results show that respondents have little understanding of the nature of conflicts, although the objective evaluation of the possibility of disputed situations when performing the land surveying and cadastral works is necessary in order to have no conflicts. Detailed results are given in the article

Key words: cultural competence, reconciliation training, case study, land dispute, reconciliation competence

30 Model Structure of the National System of Regulation of the Chemical Products Circulation.

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The national system of chemical products/chemical substances circulation regulation in the Russian Federation is complex, multi-component and with many interactions between its elements. It is constantly changing and evolving under the influence of external and internal factors. First of all, such factors are international regulation in this area and national priorities. The model of the national system of chemical products/chemical substances circulation regulation in the Russian Federation is described. The objects of regulation, system participants, national priorities, state regulation indicators, information resources and other aspects are discussed in detail. Methods of informing regulation system members about hazards in the process of circulation are on consideration. One of the Russian Federation model regulation system elements is the Center for the provision of information in emergency situations the turnover of chemical products. It allows providing timely the necessary information to any interested person in case of an incident

Key words: chemical products/chemical substances, regulation objects, regulation indicators, information resources, state regulation instruments

37 The Problem of Regulating the General Technical Requirements for Defense Industry Products.

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One of the main objectives when creating defense industry products is to ensure their high functional and operating characteristics. A necessary condition for solving this problem is the presence of normative documents, clearly regulating the relevant requirements for developed products. In accordance with existing practice, the main technical characteristics of defense products are specified in the relevant policy documents and supplemented by the general technical requirements regulated by normative and technical documents of general specifications. Currently, however, the general technical requirements for defense products in the form of actual requirements with different level of detail are regulating by the four standards of different status and system documents. The existing normative documents, regulating the general technical requirements for defense products are analyzed. Proposals to update these documents and to make them more efficient are formulated

Key words: defense industry products, technical standards, system of general technical requirements, nomenclature, terminology and definitions

43 Monitored Object Model Conformity as a Key to the Reliability of its Results.

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The problem of choosing an adequate product controlled parameters' model that provide a reliable results of the measurement control

is on consideration. This is necessary when analyzing the existing control methods and the new efficient methods development. As an example of multipoint monitoring control procedure where several product parameters are controlled is given. However, type first and second errors could occur while monitoring of a single product parameters. That is why an inappropriate product (because of one parameter) may be rejected under the control of another parameter. The correct choice of monitored objects mathematical model allows obtaining reliable estimates of customers and manufacturers risks, as well as the probability of second type error. It is recommended to calculate these indicators in multipoint monitoring by simulation method

Key words: serial products, single piece, measurement control, multipoint monitoring, monitoring results, reliability evaluation, product controlled parameters' model, simulation method

46 On the Federal State Metrological Control.

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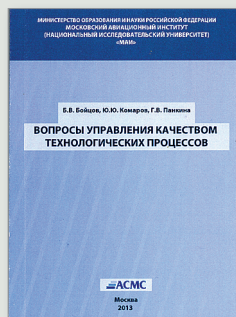
The aim of this publication is to introduce the Federal state metrological control (FSTC) order provided by the Federal law dated June 26, 2008 N 102-FZ On ensuring the traceability, its objectives and tasks to the technical community. Such review may be useful as the specific provisions of the law are ambiguously interpreted, difficult to understand, contradictory, and require a large number of subordinate acts. In terms of supervision they do not respond to a series of questions made not only by the specialists carrying out metrological works, but also the inspectors. The ambiguity of requirements of the Federal law On ensuring the traceability in the part of the Federal state metrological control is shown. Existing contradictions and clarifications to the FSTC order are given. These will contribute to a more profound understanding of the law and the Federal state metrological control peculiarities

Key words: federal state metrological control, assurance of uniformity of measurements, measuring instruments, quantity units' standards, reference materials

НОВАЯ КНИГА

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Вопросы управления качеством технологических процессов



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В учебном пособии излагаются основы менеджмента качества, рассматриваются принципы менеджмента, эволюция методов обеспечения качества и требования к системам менеджмента качества, дается анализ видов контроля качества, их особенности, условия применения и недостатки.

Обсуждаются вопросы управления качеством технологических процессов. Приводятся примеры использования статистических методов при совершенствовании технологических процессов изготовления изделий из полимерных композиционных материалов.

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