Summary

MECHANISMS OF INDEPENDENT LEARNING QUALITY ASSURANCE BASED ON THE ANALYSIS OF DEMAND FOR UNIVERSITY GRADUATES AT LABOUR MARKET AND RECOMMENDATIONS ON THEIR PRACTICAL APPLICATION.

Vitaliy V. Borsch, Ekaterina G. Abramova
Moscow Automobile & Road State Technical university (MADI)

A new model for independent evaluation of the higher education quality named «PROvuz» is presented in the article. The main idea of «PROvuz» model is to evaluate higher education quality by analysing the demand for gratuates. Also, the article describes the performance indexes and examples of evaluation result application.

STUDENTS AND EMPLOYERS ABOUT THE TWO-LEVEL EDUCATION SYSTEM AND THEIR ASSESSMENT OF QUALITY ASSUARANCE AT UNIVERSITY

Natalia V. Vozhennikova, Svetlana V. Vikhareva, Olga G. Smirnova
Vyatka State university

The article provides students' and employers' opinion review of higher education reform and importance of developing common cultural competences among graduates. The employers' opinion about graduates of Vyatka State university is also cited.

THE MODEL OF UNIVERSAL COMPETENCES OF A QUALIFIED ENGINEER

Sergey I. Gerasimov
Siberian State Transport University

The article proposes a general competency model for professional engineers. The characteristics of development stages and indicators of general engineering competencies are considered.

PROFESSIONAL TRAINING IN INNOVATION AND COMMUNICATION TECHNOLOGIES WITHIN THE IMPLEMENTION OF THE GRADING-RATING SYSTEM (GRS)

Alexander S. Ksenofontov, Rita V. Gurfova, Larisa A. Moskalenko
Kabardino-Balkarian State university named after H. M. Berbekov

The article attempts to further explore aspects of training ICT professionals within the rating system. The authors examine labor market for computer science specialists and prospective teaching techniques addressed to ICT students. One of the ways to organize educational process based on rating system of knowledge, skills and competencies control was proposed

DEVELOPMENT AND IMPLEMENTATION OF BASIC

EDUCATIONAL PROGRAMMES IN ENGINEERING AND TECHNOLOGY

Igor A. Safyanninkov, Emiliya N. Belomestnova, Mikhail G. Mimin
Tomsk Polytechnic University

A systematic approach to organizing the process of developing and implementing basic engineering educational programmes is regarded by the authors in line with the new educational standards. The experience of National Research Tomsk Polytechnic University has been studied in this area. A prominent feature of the presented project is that it is focused on all inputs and outcomes of the educational process: from the goals of professional education itself to the goals of the concrete activity, from developing training technologies to choosing quality evaluation methods.

TOPICAL ISSUES OF PERSONALITY-CENTERED PROFESSIONAL EDUCATION QUALITY MANAGEMENT

Roman E. BULAT / Military Technical University (St. Petersburg)
Elena Yu. SHADRINA / Tomsk Polytechnic University

Establishment of government system of education quality management is one of the major issues in government educational policy. Priority of personality development also belongs to these major issues. However, existing approaches to management of educational systems cannot provide the implementation of personality-centered education concept. Engineering education quality management systems should be developed not only in the engineering subsystem but also in psychoeducational, organizational, methodological and other subsystems.

EXPERIENCE IN THE SHORT-TERM EDUCATIONAL ENGINEERING PROGRAMS REALIZATION AT KABARDINO-BALKARIAN STATE UNIVERSITY

Alim B. Khuranov, Alexander S. Ksenofontov
Kabardino-Balkarian State university named after H. M. Berbekov

The article is dedicated to short-term educational programmes in engineering specially designed for college graduates , who have already obtained knowledge and skills at vocational education level. The problems of legislative and methodological standards are discussed. Kabardino-Balkarian state university named after h. M. Berbekov shares good practices in this area.

PUBLIC AND PROFESSIONAL ACCREDITATION OF EDUCATIONAL POGRAMMES. WHO NEEDS IT AND WHY?

Yury P. Pokholkov
Tomsk Polytechnic University

The development of professional public accreditation in engineering and technology is considered in the article. The author points out distinctive accreditation features in Russia and abroad.

RUSSIAN SYSTEM OF PROFESSIONAL ENGINEERS CERTIFICATION AND REGISTRATION BASED ON THE APEC ENGINEER REGISTER INTERNATIONAL STANDARD

Petr S. Chubik, Alexander I. Chuchalin, Alexander V. Zamyatin
Tomsk Polytechnic University

The quality assurance system in engineering education has proved its efficiency in a large number of developed countries all over the world.

International experience on the matter and first results of attempts to develop a similar system in Russia on the base of the APEC Engineer Register international standard are presented in the article.

EUROPEAN ENGINEER QUALIFICATION FOR RUSSIA

Vladimir M. Sitsev, Mikhail Yu. Rachkov
The Russian Union of Scientific and Engineering Organizations

The paper describes the structure of accreditation standards for engineering programmes and requirements to receive the degree Euroengineer for Russian specialists. This information helps to estimate conformity of the educational process level in Russia to the European level, to accredit Russian educational programmes and to certify specialists as Euroengineers. The history and activities of European federation of national engineering associations and Russian federation of scientific and engineering associations are presented.

ACTIVITY OF THE IGIP RUSSIAN MONITORING COMMITTEE AND DEVELOPMENT OF THE ACADEMIC MOBILITY

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IGIP is one of the oldest (since 1972) European non governmental organisations dealing with higher education teachers' training. The IGIP National Monitoring Committees (NMC) have now become important IGIP "branches" in many countries. The IGIP Russian Monitoring Committee (RMC) was organized in 1993. RMC coordinates the efforts of the IGIP Centres of Engineering Pedagogy to reinforce the linguistic and communicative training in order to promote international academic mobility. Members of RMC organize the international university consortiums to realize Tempus Projects.

SOME PROBLEMS IN THE DEVELOPMENT OF ENGINEERING IDEAS IN RUSSIA AND ADVANCED LIFE-LONG PROFESSIONAL ENGINEERING LEARNING

Sergey G. Kukushkin / Information Satellite Systems Joint-Stock Company
Michael V. Lukyanenko, Natalya P. Churlyaeva/ Siberian State Aerospace University

Some general problems of training creative engineers are briefly outlined. More profound consideration is given to the specific problems related to the isolated nature of Russian engineering and the reasons for its low creativity are explained. The prospects for the engineer thinking further development are associated mainly with continuing professional training systems at enterprises that pursue innovative activity such as Information Satellite Systems Joint-Stock Company.

HUMANITARIAN MEDIUM IN AN ENGINEERING UNIVERSITY: IS THE IMPLEMENTATION OF WORLD-LEADING EXPERIENCE INTO DOMESTIC ENGINEERING EDUCATION POSSIBLE OR NOT?

Natalia V. Trubnikova
Tomsk Polytechnic University

The article is devoted to the problem of humanitarian medium management in engineering university. Based on the vast experience in humanitarian medium management of "top-level" technical

universities (Ecole Polytechnique de Paris, Massachusetts Institute of Technology and RWTH Aachen University) practical recommendations to improve the educational environment of a Russian technical university are formed.

ENGINEERING MANPOWER FOR REAL ECONOMY

Evgeny M. Romanov
Mari State Technical University

Global financial crisis reminded that Russia lacks highly qualified, adapted to the market specialists without who it is impossible to improve economy. With a diploma on higher education, alumni should immediately start work, applying innovative knowledge and skills, being able to introduce them. But how should the specialists be trained? What do we need to start with? What are the problems technical universities face with? Are there universities ready to share their specific results in training engineers, who can already meet the demands of the current industrial environment? These are the main issues discussed in the article.

FUNDRAISING IN RUSSIAN UNIVERSITY

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Tomsk Polytechnic University

Based on international experience we suggest organizational design of fundraising activity for Russian universities. The main forming principal of the structure is that pedagogic activity is aimed at developing the social university web. The key player in this case is a supervisor who maintains contacts with graduates, students and alumni. The supervisor and his social chains are the social capital of the university.

PERSPECTIVES OF ENGINEERING EDUCATION FOR INDUSTRIAL AND INNOVATIONAL DEVELOPMENT OF KAZAKHSTAN REPUBLIC

Gulnara M. Sarsenbayeva
Kazakh National Technical University named after K.I.Satpaev

The article is devoted to the contemporary approaches for developing high engineering education in accordance with national and international challenges. Ways of improving quality assurance system and sustainable institutional development of the main university activities are regarded by the author.