190

Аннотации статей на английском языке

THE IDENTIFICATION OF THE PROFESSIONAL EDUCATION AS A INTELLECTUAL CAPITAL REPRODUCTION PROCESS

S.S.Naboytchenko

Ural States Technical University

Professional education in modern market-oriented economy conditions is regarded by the authors as a process of knowledge capitalization and the owners of the capital are viewed as members of market economy sector. The authors consider to be advisable to mark out the sphere of Intellectual activities as an independent sector. To achieve this, as the paper describes, it is necessary to set up the structure of national intellectual centers with the leading role of technical universities which are supposed to become the kernel of all national innovative system.

RUSSIAN AND INTERNATIONAL EXPERIENCE IN RATING ANALYSIS FOR HIGHER EDUCATION INSTITUTIONS AND EDUCATIONAL PROGRAMMES

Yuri P. Pokholkov, Alexander I. Chuchalin, Boris L. Agranovich, Sergey B. Mogilnitsky

The paper is dealt with problems of rating analysis for higher education institutions and educational programmes provided in Russia and abroad. The experience of the USA, Canada, Great Britain, China and Russia has been studied in this area.

On the basis of the analysis conducted, a new model of rating for higher education institutions was proposed according to groups of educational programmes developed for specialists taking into account opinions of all interested parties on the quality of training, i.e. students, alumni, academic community, business circles, and industry.

SUMMARY OF THE ARTICLE

V.V. Neiman, V.I. Tarasov , IrGTU, Department of Electric Power, Networks and Systems

Methodological problems of improving specialitsts' preparation is presented here.

The description of methodological scheme of thinking formation during the process of study is considered in the article.

The importance of use of psychology in the thinking process(dynamic in thinking on subconsciousness) in the actual methods of teaching is discussed.

FUNDAMENTAL AND TECHNOLOGICAL KNOWLEDGE IN ENGINEERING AND TECHNICAL EDUCATION OF THE 21ST CENTURY

Tomsk State University of Control Systems and Radioelectronics, A.D. Moskovchenko

The problems that appear due to the interconnection between fundamental and technological knowledge are considered in the light of the Bologna Process. The idea of the united fundamental and technological university is suggested. The empirical material obtained from both the nuclear-energetic enterprise and engineers and physicist training is taken to carry out the analysis.

THE QUALITY OF EDUCATION DURING THE TRANSITIVE DEVELOPMENT OF A SOCIETY

Tomsk Polytechnic University A.P. Moiseeva, V.B. Agranovich

The education quality becomes one of the main parts of the corporate culture in the information based society. Nevertheless «quality» as a philosophical category was already considered in Aristotle's works. Great attention to this problem was paid in Hegel's and Marks's works. The authors of this article examine the appliance of the philosophical reflection on the contemporary education quality understanding in the transitive society. The author refers to the category of quality in historico-philosophical discourse and considers the philosophical category of quality as a methodological basis of the quality of education.

The article points out that our state should acknowledge the priority of quality of education and find the necessary

financial resources for the development of education.

The main purpose of quality of education is the realization of the basic principals of quality management.

The improvement of quality training specialists is directly connected with the increasing role of higher education in all spheres of human activity. The quality of education leads to further labour intellectualization based on contemporary information technologies.

The quality of education increase is affected by fundamentalisation and differentiation of education, the development of which meets the needs and possibilities of information society. Speaking about quality, one should bear in mind, that it is not only important to raise quality of subject under study but also to create innovative fundamental academic courses for education which are intended for the formation of modern conceptions about the mapping of the world – scientific mapping of the world, linguistic mapping of the world and so on.

CRITERIA AND PARAMETERS OF QUALITY OF EDUCATION

N.P.Zagraj, V.N.Pukhovsky, I.A.Sinyavskaya Taganrog state university of radio engineering (TSURE), Taganrog, the Rostov region, Russia, e-mail: znp@tsure.ru

The paper discusses various approaches of education quality estimation. Information parameters in accreditations of professional education programs, various versions of criteria approaches and numerical parameters applications are offered.

THE CONCEPTUAL PRINCIPLES OF METHODOLOGY COMPONENT OF MULTILEVEL ENGINEERS TRAINING

Lili Gourier, Kazan State Technological University, liligourier@mail.ru

Abstract. The actuality, essence, main characteristics, structure, and stages of methodology component of multilevel engineers training at technological university are shown and grounded in this article. The theoretical bases of methodology component and its role in forming

of readiness to engineering activities are given.

THE SYSTEM APPROACH TO THE ANALYSIS OF THE TECHNICAL UNIVERSITY SCIENTIFIC AND INNOVATIVE ACTIVITIES

A.Ilyshev, N.Ilysheva, I.Voropanova Ural States Technical University

The basic principles of the system approach to analyzing scientific and innovative activities (SIA) in the technical university are formulated in the paper. To build the system of effective indices of scientific innovative process the authors developed the algorithm of systematization of SIA indicators in terms of morphological research. The types of SIA resources reproduction are elicited in the paper on the example of personnel potential in the technical university.

QUALITY MANAGEMENT SYSTEM IN A HIGHER EDUCATION INSTITUTION

Michael V. Korovkin, Sergey B. Mogilnitsky, Alexander I. Chuchalin

The paper is based on problems of the quality assurance in education by establishing and certifying quality management systems in higher education institutions. This paper presents a number of the most common models used by higher education institutions in establishing quality management systems for educational services and research.

Based on the practical experience, authors propose one of the possible variants of forming the quality management system and its certification in a higher education institution.

IN-SCHOOL QUALITY ASSURANCE SYSTEM FOR SPECIALIST TRAINING

Moiseev V.B., Rector, Professor, Dr. Pedag., E-mail: rector@pti.ac.ru Andreyev A.B., Vice-Rector of Training, Assistant Professor, Cand. Sc. (Tech.), Penza State Technological Academy

This article deals with the importance of increasing education quality at the contemporary stage as the mechanism of increasing the competitiveness of educational services of the given higher school. It touches upon the problem of the system approach to providing specialists'



191

192

training quality, based on the standard IS 9000. The particular feature of the system under study is the availability of the feedback "Enterprise-Specialist", and the quality analysis is made with the help of the expert system designed at the higher school and realized in the form of electronic testing system.

CHAIR'S QUALITY MANAGEMENT SYSTEM OF PREPARATION OF THE SPECIALISTS BASED ON THE PROCESS APPROACH

Suslov A.G., Ovdienko A.G. Bryansk state technical university

The quality of preparation of the specialists in higher educational institution largely depends on activity of chairs. The chair is main educational-scientific structural subdivision of higher educational institution executing educational, methodical, training and research activity, and also preparation scientific-pedagogical of staff and increase of their qualification.

Quality management system ensuring continuous management for all chairs components is necessary for successful and effective operation of the numerous interconnected kinds of activity on the chair.

To these requirements chair's quality management system of preparation of the specialists of Bryansk state technical university satisfies.

Chair's quality management system constructed on process the approach on model of the standards ISO 9000:2000, allows successfully and effectively to function to the various interconnected kinds of activity. It provides a continuity of management, as with process, and on the joint of separate processes within the framework of this system, and also at their combination and interaction. It allows effectively to control and in time to execute interference in process at that or other level.

Chair's quality management system envelops all cycle of preparation of the specialists. The realization of the given system allows considerably to increase quality of preparation of the specialists.

SYSTEM ELABORATION WITHIN THE UNIVERSITY AIMED AT STUDENTS' INVOLVEMENT INTO THE INNOVATIVE ACTIVITY

S.A. Podlesny, V.I. Temnykh, A.A. Iptyshev, I.M. Polezhaeva Krasnoyarsk State Technical University Krasnoyarsk State Academy for Architecture and Civil Construction

The article focuses on the formation of the main principles of students' involvement into the innovative activity within the university.

CONTROL OF QUALITY AT CORPORATE NUCLEAR UNIVERSITY

B.Kerbel, I.Popova, N.Fedosov Seversk State technological institute

The brief items of information about Association "Corporate Nuclear University" from a position of quality of the let out students are resulted. The necessity of the system approach to maintenance of quality is underlined. The basic processes and subprocesses of system of management of quality at branch university are evidently submitted.

QUALITY MANAGEMENT IN HIGHER PROFESSIONAL EDUCATION

Evstigneev V.V., Siemkin B.V., Scherbakov N.P.

Polzunov Altai State Technical University

Administrative and managerial structure of quality management at higher educational institutions is considered. The competency, functions, tasks of HEIs departments are pointed out. The basic principles of quality policy and the ways of its realization at HEIs are formulated. The structure of Quality control system, concerning specialist's training, considered as a subsystem of Quality Management System is given.

THE SOME PROBLEMS MANAGEMENT QUALITY EDUCATIONALLY SERVICES.

Orekhova R.A., East-Siberian State Technological University, Orekhov A.N., Tomsk Polytechnic University,

The conception of system approach of increasing quality pedagogical system is represented. It was showed, that growth of the quality at the educational process may be arrived on the way of forming transformational intellect.

The criterion quality evaluation is offered. It keeps positive properties of the average ball, but it hasn't its defects and it is suitable for using at management quality educational process systems.

Effective management quality educational system must maintain three stages, co-ordinate with themselves with criterions system and forming transformational intellect logic.

THE SPECIALIST'S CLAIM ON THE LABOUR MARKET AS AN EXTERNAL CRITERIA OF THE ASSESSING OF QUALITY OF EDUCATIONAL PROGRAMME'S.

N.G. Vasilchenko, E.V. Burlukina

In this article the conceptual approach in determining of external criteria of specialists claim in the connection of complex interaction of labour market and educational service market is given. The determining of quality of educational service should be considered on 2 levels: the internal that is the quality of the "consumer". The internal level of quality is the level of development of a system of organizational, methodical, economical, management (administrative) and pedagogical mechanisms and techniques of forming the quality level of educational process of a professional educational institution.

The external quality level is defined by the "consumer", the employee on the labour market and is expressed by the level of claim of speciality (educational programme), a graduate, as well as the necessary range of knowledge, abilities and skills. The level of claim of a specialist also depends on the market conjuncture and the situation on the given labour market.

STUDENT ATTITUDE TO EDUCATIONAL PROGRAMMES AS A CRITERION FOR THE QUALITY OF EDUCATION

Olga V. Marukhina, Olga G . Berestneva, Lubov I. Ivankina Tomsk Polytechnic University

The integrated assessment of the quality of education includes evaluation of a number of positions one of which

is the student assessment of the quality of educational programmes. This quality dimension has been investigated by authors through a definition of student attitude to more or less attractive educational programmes offered by the university with their principal features. This allowed defining the system of priorities and the level of students' interest in the study of educational programmes which satisfy educational standards. To explore this problem, authors have developed the algorithm of revealing object rules for

PROBLEMS AND WAYS ON THE ISSUES OF TECHNOLOGY ENGINEERING EDUCATION

Mikityansky V.V., Mikiteanskaya L.M. Astrakhan State Technical University

The analysis of Rassian engineering education conditions was made in this article. It was shown that the main problem of its quality and efficiency increase is connected with universities inability to react adequately on environment's changes. The directions of these principles realization were examined, new organizational structure and University management system were offered.

THE OUTLINE OF QUALITY MANAGEMENT PROCESSES IN FOREIGN LANGUAGE TEACHING

A.I. Chuchalin, S.B. Veledinskaya, Sh.S. Rouiz, I.S. Okhotin Tomsk Polytechnic University

The quality of foreign language teaching depends on numerous factors that is training in the field of foreign languages, teaching staff, teaching and methodical security, material and technical basis. However, the improvement of quality of teaching foreign languages is impossible without the quality management system being introduced. The elaborated outline of quality management processes, aimed at meeting international standards ISO 9001:2000, enables carrying out the systematic analysis of interconnection and interdependence of the processes; reconsideration of the activity of university organization departments and individual employees of these departments.



193

194

DIDACTIC PRINCIPLES OF SELECTING STUDENTS FOR STUDYING ON THE BASIS OF ADVANCED PROFESSIONALLY ORIENTED EDUCATIONAL PROGRAMMES

P.S. Chubik, M.G. Minin, N.S. Michailova Tomsk Polytechnic University, Tomsk. Russia

The article highlights the problem of students' selection for studying on the basis of elite technical education program (ETE). The authors suggest the diagnostic criteria of the skills necessary for such specialists. A psychological-pedagogical toolset has been developed on the basis of identification of learning capability level. The organisational and pedagogical conditions for the testing have been determined and a thorough analysis of the results obtained has been carried out.

PERSONAL FACTOR WITHIN THE SYSTEM OF ENGINEERING EDUCATION

V.A. Salnikova

Siberian State Automobile and Highway Academy (SibADI), Omsk

The paper shows the necessity to enhance the educational process in the course of implementing new technologies which take into account the personal factor and requirements to the future professional activity.

TRANSITIVE PERIOD OF THE SOCIETY DEVELOPMENT AND EDUCATIONAL PROCESSES

V.B. Agranovich Tomsk Polytecnic University

This article is devoted to the topical and poorly studied problem. The issue of transitive society is of current interest for such scientists as politologists, sociologists, culturologists, economists, and philosophers. In this article the problem is studied from the social and philosophical points of view. Besides, to study the problem of the transitive society different approaches are considered. The society's common features are shown.

Not a single culture can develop without creative innovative potential. Hence, the transitive process is connected with the innovative process. However, the situation appears to be more complicated.

Having considered this correlation from the point of view of categorical field of "opened" and "closed" society, an attempt to reveal the complexity of such correlation is made.

The author of the article tries to consider the innovation problem of education within the transitive society resorting not only to the aggregate social and philosophical approach. The outline of this approach is considered to be the analysis of education innovations within the transitive society. The development peculiarity of the University of Innovative Type is considered. The expected future development of universities of such types within the Bologna Agreement educational field is outlined.

The author hopes that the problems revealed in this article are topical and they deserve to be discussed within the framework of the scientific association whose work is based on modern perception of knowledge and ignorance, rational and irrational things, and new epistems in contemporary cognition.

A SPECIALTY'S RATING AS A QUALITY FACTOR OF FORMING STATE PLAN IN TRAINING ENGINEERS FOR DEFENSE INDUSTRY ENTERPRISES

Gennady P. Turmov, Anvir A. Fatkulin, Valentin G. Shamshin Far-Eastern State Technical University

The paper examines basic approaches and methodologies of forming state plan in training engineers for defense industry enterprises, based on the principle of quality of the training. Summarized rating of a specialty, integrating faculty's credentials and activities of departments and a university as a whole, becomes the quality factor analyzed in the paper.

INNOVATION PROBLEM-ORIENTED LABORATORY PRACTICAL TRAINING IN MECHANICS INCLUDED IN PHYSICS COURSE

I.P. Chernov, V.V. Larionov Tomsk Polytechnic University

The paper is dealt with the organization of problem-oriented laboratory practical training in the course on Physics. Suggested is the implementation of the problem-oriented practical training at jun-

ior years of study. In particular, this innovation is realizable for physical students of technical universities. This paper gives the example of implementation of this type of education within the laboratory practical training in Mechanics 'Compound (reversible) Pendulum'

NOVOSIBIRSK STATE TECHNICAL UNIVERSITY IN THE LIGHT OF THE BOLOGNA PROCESS: ACHIEVMENTS AND PROBLEMS

N. V. Pustovoy, Yu. A. Afanasyev, Ye. A. Zima

Novosibirsk State Technical University

Measures for higher education system modernization for Russia to join the European higher education area have been considered in the paper. The experience of Novosibirsk State Technical University in implementing the basic principles of the Bologna Declaration has been analysed.

INFORMATIONAL – ANALYTICAL TRACKING OF A POST GRADUATE COURSE OF ENGINEERING EDUCATION

Galinovski A., Danilin A. The Moscow state technical university named Bauman Ducsova V. The Moscow state university named Lomonosov

In the article the problems of creation of a system of informational - analytical tracking of the post-graduate students of engineering high schools are reviewed. The technique of maintenance of successful scientific - creative contacts between the scientific chiefs and post-graduate students is offered. The efficiency of informational - analytical systems of maintenance of engineering education is studied. The application of informational - analytical systems at engineering and naturallyscientific universities is recommended.



195