

Pedagogical Sciences

L.K. Ilyashenko

Professional Skills of Engineering Students and Mathematical Problems Facilitating their Development

Key words and phrases: mathematical problems; professional orientation; professional skills; technical student.

Abstract: The article deals with professional skills developed in conditions of interdisciplinary connections of mathematics and majors; one of the most important ways of developing the required skills is the solution of mathematical problems that simulate professional problems.

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E.V. Sakharova

The Problem of Adaptation to School: Four Components of Adaptation and Parental Involvement

Key words and phrases: adaptation; adaptation components; parental involvement; unified model.

Abstract: In this article, the author attempts to combine the existing approaches to the concept of "adaptation of a child at different stages of schooling" and consider a unified model of tracking the processes of adaptation, taking into account the impact of parental involvement on the features of adaptation.

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Economic Sciences

R.E. Griбанov

The Problem of Efficient Performance of Employees

Key words and phrases: burnout syndrome; efficiency; goals; motivation; personnel management; results.

Abstract: The article deals with the problem of low productivity of the staff, motivation and incentives for employees, the problem of professional burnout. The performance evaluation encourages employees to implement the assigned duties in full and carry out professional activities efficiently.

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D.I. Razakova

A Study of the Current Condition of the Agrarian Market of the EEU Member Countries and its Development Priorities

Key words and phrases: agricultural market; export; founding members; import; integration; the EEU.

Abstract: The article presents an assessment of the current trends of economic integration of the founding members of the EAEU in agriculture. It is concluded that although the countries of the Eurasian Economic Union are targeting mutual trade in agricultural products, food and raw materials, there is an increasing tendency of strengthening its multi-vector directions, while imports of agricultural products, raw materials and food continue to dominate both in mutual and foreign trade.

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E.V. Sukhanov

The Influence of the Economic Development on the Improvement of Welfare of the Regional Population

Key words and phrases: competition; economy; market; population; profit; trade; real income.

Abstract: The subject of the quality of life has been of interest to a wide range of researchers; it is a subject of scientific discussions that speaks about its undoubted relevance.

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Historical Sciences and Archeology

S.E. Ilyin

Criteria for Comparing Self-Presentations of Higher Education Institutions from Network Perspective

Key words and phrases: analyzing relevant information; contemporary institutions of higher education; Internet materials of self-presentation; partnership network.

Abstract: The article proposes to use online self-presentations of higher education institutions as a source of data about partnership networks of these institutions. Criteria for comparing appropriate information across different self-presentations are outlined, i. e. the criteria for comparing data on actors within networks of higher education institutions, the criteria for comparing information about relations in such networks, and the criteria for comparing allusions on prospects of the particular networks, contained in the materials of self-presentations.

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Ch.V. Tigiev

The First World War through the Eyes of Combatant's Wife (the Study of E. I. Denisova's Letters)

Key words and phrases: letters; war; world view.

Abstract: For the first the excerpts from the letters of a military officer's wife to the army are published. Information obtained from the letters, allows for reconstruction of some aspects of daily life in the rear of the city, to trace the change of worldview, individual and social behavioral practices of non-combatant population.

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Biological Sciences

I.A. Leontyeva

Biodiversity of Hortobiont and Herpetobiont Insects in the Urbanized Territories of Nizhnikamsk in the Republic of Tatarstan

Key words and phrases: fauna; herpetobiont; hortobiont; Insecta; the Red Book of the Republic of Tatarstan; urbacenosus.

Abstract: The paper gives some results of species composition and abundance studies of hortobiont and herpetobiont insects in the urbanized territories of Nizhnikamsk (the Nizhnikamsk region, Republic of Tatarstan). During the study 32 hortobiont and 18 herpetobiont insect species have been discovered. They belong to 17 families, with 3 of them listed in the Red Book of the Republic of Tatarstan.

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Construction and Architecture

S.A. Sychev

Adaptability Evaluation of Construction of Buildings and Structures from Prefabricated Modules

Key words and phrases: block rooms; high-speed construction; modules; modular buildings; prefabricated blocks; prefabricated structures; transformable structures.

Abstract: The modeling method and subsequent multi-criteria optimization of technological solutions have been used. The principles of high-speed pre-fabricated industrial construction in conditions of Northern regions have been summarized. There are several types of methods for using industrial unified pre-fabricated structures in the form of light-weight multi-layer sandwich panels and aggregated block-modules. They are: complex mechanization of assembly processes, transportation and sequenced-flow organization of assembly on the basis of supplying aggregated sandwich panels. The information-technology model of the industrial construction system is presented in the mathematical form, which makes it possible to carry out accurate analysis of defects in pre-fabricated module buildings and implement the technology of accelerated assembly.

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Machine Building and Engineering

I.R. Shegelman, A.S. Vasilyev, P.O. Shchukin

The Study of the Technical Level and Trends of Check Valves

Key words and phrases: check valves; fittings; pipe.

Abstract: Using the research and analysis of scientific and technical information we conducted the study of technical level and trends of the check valves for the main pipelines for nuclear, thermal and gas industries.

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Legal Science

K.A. Kobylsky

The Concept and Purpose of the USSR Award System

Key words and phrases: legal regulation; state awards; state system of awards.

Abstract: On the basis of modern theoretical research, the author gives the definition of “the award system” and considers its purpose during the time period from 1917 to 1991. The author concludes that the main purpose of the state awards of the USSR was rewarding; in addition, the award system served as an ideological instrument.

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Historical Sciences and Archeology

O.N. Astafyeva

Modelling of Intercultural Dialogue Space in Cultural Policy: Opportunities and Limits

Key words and phrases: cross-cultural communications; cultural policy; culture; dialogue of culture; intercultural communications; interdisciplinary; modeling; system; multifactors.

Abstract: The article is devoted to the problems of methodology of research of sociocultural processes, in particular, to studying the intercultural (cross-cultural) communications. They have been experiencing essential changes in the modern conditions of geopolitical, economic, and technical development. The essence and specifics of modeling in humanitarian knowledge has been revealed; opportunities and restrictions of models on regulation and management of dialogue space are shown. A set of factors influencing anthropological socio-cultural systems puts forward a problem of selection of primary options of regulation. These include valuable and semantic bases of cultural policy, the relevant strategy and tools shaping a model framework. Modeling as procedural interdisciplinary technology acts as an effective tool of forecasting and achieving intercultural (cross-cultural) dialogue, which fulfills integrative and stabilizing functions in the society.

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O.V. Voronkova

Cultural Capital in the Reflection of Tolerance

Key words and phrases: cultural capital; individual tolerance and flexibility; tolerance as a way of life; universal tolerance; values and meanings.

Abstract: The modern world produces new values and meanings, creating a new cultural capital of nations. A human being is never fully satisfied with the achieved results. It is important that people have learned to appreciate the harmony of life so that they could understand themselves and others; this will lead to the formation of new facets of cultural capital of humanity and will mean the transition from individual tolerance to universal tolerance as a way of life.

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Economic Sciences

A.R. Atabekov

Small Innovative Enterprises in Public Procurement: Economic and Legal Mechanisms for the Development of the State Market Segment for Small Innovative Enterprises

Key words and phrases: innovation; innovation policy of the state; innovative procurement; small innovative enterprises.

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Abstract: The article analyzes the economic and legal mechanisms for the small innovative enterprises to participate in public procurement. The paper puts forward specific mechanisms to stimulate the development of innovation policy, proposes measures to increase the number of small innovative enterprises participating in public procurement.

I.Ya. Lvovich, A.P. Preobrazhensky, V.E. Savchenko

The Possibility of Developing the CAD Subsystem for the Analysis of Scattering Characteristics of Hollow Structures

Key words and phrases: hollow structure; scattering; CAD.

Abstract: In this paper, the solution of scattering problems of electromagnetic waves on metallic structure is given. The system of integral equations for surface currents was applied. The recommendations for building the CAD subsystem are given, within which there is the possibility of designing technical objects with hollow structures, having the required values of the scattering characteristics.

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T.B. Malinina

Social Aspects of Environmental Safety

Key words and phrases: consumption; environmental safety; people; production.

Abstract: This article deals with the issues of environmental safety in terms of production and consumption, which are considered as social processes of human life. In order to prevent a threat to safe and comfortable living and development of an individual, it is necessary to direct the strategy of sustainable development to the rational interaction of production and consumption.

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A.V. Pannikova

Private Property and its Stratification Function

Key words and phrases: private property; stratification function; class function; status function; ownership of the means of production.

Abstract: This paper analyzes the stratification function of private property. From the historical perspective the author proves that this feature is characteristic only of private property, not property in general. The ratio of the stratification and status functions of private property has been determined.

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V.E. Savchenko

The Possibility of Modeling Socio Economic Development of the Region

Key words and phrases: decision-making; integrated model; modeling; socio-economic development.

Abstract: The paper explores the possibility of modeling socio-economic development of the region. The example of the system of indicators related to socio-economic development of the region is studied. A generalized model of the system create has been created. It has been proved that the use of this model allows investigating the socio-economic characteristics of different regions of our country.

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I.G. Khangeldieva

International Partnership in Performing Arts

Key words and phrases: cooperation; co-production; musical theater; music festivals; partnership; performing arts.

Abstract: The paper considers co-production as one of the modern tendencies in the work of musical theaters in Europe and Russia.

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Construction and Architecture

D.A. Lipilin, T.A. Volkova, A.A. Mishchenko, V.V. Minenkova

Evaluation of Recreational Resources of Protected Areas in Western Caucasus Using Space Shooting Methods (Case Study of the Tuapse District)

Key words and phrases: protected areas; tourism; tourist and recreation facilities; Tuapse district; recreational facilities; Western Caucasus.

Abstract: The study analyzed recreational resources of protected areas of the Tuapse

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district in the Krasnodar region, maps of terrain, slope terrain maps have been made; the density of protected areas in the region has been measured. The Tuapse district has a unique combination of natural recreational resources that can create a foundation for further development of educational, medical, sports and ecological tourism and recreation in the well-developed regional system of protected areas taking into account conservation of unique natural recreational facilities. Tourist and recreational use of natural resources within the area should be considered as part of environmental and social policies.

Information Science, Computer Engineering and Management

E. Yu. Aleksandrov, V.M. Tyutyunnik

Simulation of Assessing Network Information System Sustainability to Negative External Influences under Incomplete a Priori Information

Key words and phrases: conceptual model; incomplete a priori information; logical-linguistic model; negative external influences; network information system; optimization problem; parry tools.

Abstract: The model of evaluating the network information system sustainability is proposed. The model is based on the idea of the choice of means of rebutting adverse external influences. The conceptual model of decision support system on the choice of means for parry tools is proposed; its structure is modeled and detailed. Optimization problems designed to maximize sustainability of network information system under specified constraints are solved. The logical-linguistic model is proposed to determine the importance and relevance of influence developed using fuzzy inference rules. All optimization problems and their mathematical productions are described.

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A.O. Voitin, V.M. Tyutyunnik

Information Space Modeling of an Object of Cultural Heritage

Key words and phrases: 3D modeling; analytical modeling; information space; object of cultural heritage; virtualization.

Abstract: Analytic model for the description of information space of any object of cultural heritage has been developed, described and detailed. The model takes into account the typical information on the object properties, perspective and geometry in the space, coordinates of the object and converting them into space. The mathematical apparatus of scaling along the coordinate axes, panning along the axes of the coordinate system or a combination of both, the point in space rotation around axes of the coordinate system have been used. The model has been applied to 3D modeling and virtualization of cultural heritage using modern tools of computer and information science.

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K.R. Khachaturova

Information Technology as a Means of Development of Creative Abilities of Primary School Pupils in Natural Science Lessons

Key words and phrases: natural science; information technology; creative abilities.

Abstract: The article is devoted to the development of creative abilities of primary school pupils in the lessons of natural science using information technology. Creativity is seen as the process of creating through training activities.

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Linguistics

M.V. Garanovich

Interaction of Subculture Languages with Main Idioms of the Russian Language

Key words and phrases: culture; language idioms; lexical borrowing; macroidioms; microidioms; sub-culture.

Abstract: The paper describes the results of the analysis of the lexicon of subcultures of Perm; the findings showed the possibility of interaction of subculture languages with the main idioms of the Russian language; the tendency for the development of subculture slang as intermediate idioms has been discussed.

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E.V. Erofeeva, E.A. Pepelyaeva

Reflection of Professional Activity in Mental Lexicon

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Key words and phrases: mental lexicon; professional activity; professional component.
Abstract: Based on the experimental data the paper analyzes the way professional activity is reflected in the mental lexicon within the lexical-semantic field “Human”.

E.V. Erofeeva, T.I. Erofeeva, E.S. Litvinova

The Sociolinguistic Aspects of the Study of Regionalism

Key words and phrases: dialect; oral literary speech; regionalism; sociolinguistics; stratum; townspeople’s speech.

Abstract: The article deals with the sociolinguistic aspects of the study of regionalism; it addresses phonetic, lexical and the syntactic levels of the language; the regional elements in the speech of the citizens of Perm and the Perm region are described; special attention is paid to their social determination.

page 116-118

Yu.E. Leshchenko

Experimental Research into Associative Strategies Used by Bilingual and Monolingual Students When Learning Foreign Words

Key words and phrases: associative experiment; bilingualism; learning a foreign language; the strategy of associating.

Abstract: The paper presents an experimental study with two groups of informants: bilingual speakers (Permian Komi and Russian) and Russian language speakers, studying the English language in educational environment. The findings of the chain associative experiment demonstrated that bilingual learners associate English words through linguistic strategies, while monolingual students tend to use both linguistic and extralinguistic and strategies.

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Yu.E. Leshchenko, T.S. Ostapenko

Morphological Transfer in Natural Bilinguals – Native Speakers of Komi-Permyak and Russian Languages

Key words and phrases: bilingualism; borrowings; interference (negative transfer); morphological transfer; positive transfer.

Abstract: The paper describes the analysis of morphological transfer (positive and negative) using the results of an experimental study of bilingual informants: native speakers of Komi-Permyak and Russian languages. The data demonstrated that the morphemic structure of words of the contact languages has a complex two-way influence (mutual influence of ethnic language and the official language).

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E.A. Pepelyaeva

Associative Experiment as a Tool of Psycholinguistic Analysis of Semantic Structures

Key words and phrases: associative experiment; associative field; psycholinguistics; semantic field.

Abstract: The article reveals the expediency of applying associative experiment in the study and modeling of semantic structures.

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Advanced Pedagogy

E.V. Sakharova

Parental Involvement Phenomenon: Problems of Modern Families and Schools from Parents’ and Children’s Perspectives. Challenges and Solutions

Key words and phrases: axiological basis; family; parental involvement; school.

Abstract: The article raises the questions of the axiological basis of a modern family through the eyes of parents and children; the relevance of the phenomenon “parental involvement” in all spheres of life especially in the period of schooling is discussed.

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Political Science

M.F. Kamaldinova

Oncoming of «Chinese Age» in Africa through the Example of the Republic of Cote d’Ivoire

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Key words and phrases: Africa; China; Cote d'Ivoire; economic expansion; foreign policy.

Abstract: The paper discusses the phenomenon of the growing influence of the People's Republic of China on the African continent and the approaches of Chinese diplomacy to the realization of this foreign policy using the example of a particular state of the West Africa region – The Republic of Cote d'Ivoire (Ivory Coast).

Machine Building and Engineering

I.A. Polyakov, G.A. Chugunov, S.D. Kapustin

Impact of Model Parameters of the Two Connectivity Nodes Equivalent on the Calculation Convergence Domain of Static Power System Mode

Key words and phrases: active power; convergence domain; electric load; equivalent; power flow; power system; reactive power

Abstract: The article considers an equivalent with two connectivity nodes as a model in order to present the convergence domain of the calculation of static mode in power system. The following model parameters have been regarded as variables: coupling resistance, active and reactive load, active and reactive conductance of a nodal shunt, voltage of a base node. Findings about the influence of model parameters on the convergence domain of the static mode calculation are presented.

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S.M. Terekhov, V.A. Nemtinov

Basics of Designing of Information Technology System for Monitoring and Control of Power Plants

Key words and phrases: automation; boiler; information system; Labview programming environment; manager; operator; SCADA.

Abstract: This article describes the principles and aspects of designing lower and upper levels of the system of remote monitoring and control of power plants.

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Materials for Discussion

D.S. Mityuhin

Theoretical through Sustained Market Infrastructure

Key words and phrases: factors; market infrastructure; mechanism to ensure the stability; region; stability; structure; system.

Abstract: The paper studies the theoretical characteristics of the sustainability of the market infrastructure. The article defines the economic substance of the market infrastructure. The concepts of "market infrastructure", "stability of market infrastructure", "a mechanism to ensure sustainability of the market infrastructure." Obtained subjects of market infrastructure in the region. Grouped factors affecting the stability of the market infrastructure. The mechanism of ensuring the sustainability of the market infrastructure.

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