АННОТАЦИИ Abstracts

Random Graph Models and Their Application to Modeling Software Systems

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Key words and phrases: random graph; information network; stability; graph theory; programming; models.

Abstract: In programming, there are often problems of finding the shortest path or the optimal route between different points. Graph theory algorithms allow solving problems of analysis and optimization of networks, such as social networks, transport networks, communication networks and computer networks, storage and analysis of relationships between data, for example, social connections, knowledge graphs and transaction graphs. The purpose of the study is to consider random graph models and their application for modeling software systems. The research methods were analysis, synthesis, generalization and systematization of scientific sources on the research problem. The article substantiates the relevance of using graph theory in programming. The features of using random graph models to build software systems are considered. The sequence of constructing a model of the structure of a branched information network is described using the example of a 5th generation network, which is a generalization of the well-known Erdős-Rényi random graph. It is noted that Erdős-Rényi random graphs are used in various fields, such as computer science, information theory, physics, sociology and others, to model random systems and study the properties of random structures. Special attention is paid to indicators that qualitatively reflect the property of functional stability of an extensive information network.

The Analysis of Use Cases for Artificial Intelligence in Software Creation

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Key words and phrases: artificial intelligence; machine learning; software development; software testing.

Abstract: Artificial intelligence has become one of the popular topics for discussion today. This is not only the result of the work of companies selling products in the field of artificial intelligence, but also the consequences of the active use of artificial intelligence technologies (hereinafter referred to as AI) in a variety of spheres of life. Artificial intelligence systems operate in such a way that they can easily process huge amounts of information while learning themselves, which facilitates their use in solving a wide variety of problems. The purpose of this study is to analyze the capabilities of artificial intelligence tools in software implementation. The use of this kind of tools allows you to reduce the burden on developers and simplify their work, which actualizes the chosen research topic. The novelty of the research lies in the implementation of an up-to-date analysis of the possibilities of using artificial intelligence in software development. The practical significance of the study lies in the analysis of possible ways to use artificial intelligence at all stages of software implementation.

Internet Resources as a Tool for Motivating Children and Adolescents to Lead a Healthy Lifestyle

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Key words and phrases: motivation; healthy lifestyle; Internet resource; children and adolescents. Abstract: The purpose of the paper was to identify and describe stimulating factors for maintaining a healthy lifestyle for participants in an Internet resource aimed at children and adolescents. The types of Internet resources were identified, the main participants, their roles and motivations aimed at developing the skills of leading a healthy lifestyle were described. The results of the analysis are the basis for the development of the Preventorium Internet platform - a project developed by scientists and endocrinologists of the Siberian State Medical University, aimed at assessing risk groups for obesity in school-age children and motivating them to lead a healthy lifestyle.

Ontological Approach to Information Systems Integration

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Key words and phrases: information systems; integration; ontological approach; semantics; ontology.

Abstract: The research hypothesis is to study ontological approaches that make it possible to explicitly determine the semantics of the information source when integrating information systems (IS). The objective of the study is to study the possibilities of integrating information systems in order to increase their efficiency and reliability. The purpose of the research is to develop methodologies, tools and technologies for the creation, application and integration of IS based on ontologies. Research method: analysis of existing ontologies in various fields of knowledge to identify their structure. Result achieved: the ontological approach to IS integration was analyzed.

Multi-Threaded Processing of Long-Running Operations Using Coroutines in Kotlin

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Key words and phrases: multi-threaded programming; asynchrony; information systems; performance; back-end; http requests; Kotlin programming language; coroutines Kotlin; kotlinx. coroutines library; framework Ktor.

Abstract: Currently, the speed of web applications plays a decisive role in the customer service process. Users are not willing to spend a lot of time waiting for a long time for the system to respond. Therefore, to maintain a high level of service provided, developers need to pay more and more attention to application performance, in particular, the performance of long-running operations, such as accessing a database or complex calculations. The purpose of this article is to develop a multi-threaded application in the Kotlin language using coroutines to increase system performance when processing long-running operations. The web application demonstrated that it processes incoming http requests and generates a list of customer orders in multi-threaded mode. To achieve this goal, coroutines from the kotlinx.coroutines library are used. First of all, the main essences of the service being developed and the principles of their operation are described. Next, we consider the key details of the main algorithm that generates customer orders in parallel in an asynchronous mode. In the final part, the results of the application are demonstrated, and general conclusions are formulated regarding the advantages of using coroutines for developing multi-threaded applications.

System Analysis of Project Activity Management Processes in the Cities where Rosatom State Corporation Operates

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Key words and phrases: municipal practices; national projects; project activities; search tools; search system; system analysis; effective region; regional projects; digital footprint.

Abstract: The purpose of the study is to increase the efficiency of local governments in implementing measures aimed at the socio-economic development of cities, taking into account the specifics and potential of municipalities located in the territories where Rosatom State Corporation operates. The research hypothesis is as follows: the developed effective search system will allow local governments to increase their activities, taking into account the specifics and potential of municipalities located in the territories where Rosatom State Corporation operates. To achieve this goal, the following tasks were set and completed: approaches to social design were analyzed in the context of the implementation of regional policy in cities where nuclear power plants are present; meta-skills in social design and principles of lean management were studied; the problems arising during the implementation of National projects in connection with the implementation of regional state programs with the participation of Rosatom State Corporation were analyzed; an analysis of "Effective Region" projects was carried out using lean technologies; An assessment of the effectiveness of best municipal practices and socio-economic development initiatives in municipalities in the territory of presence of the Rosatom State Corporation was carried out. During the study, comparative, system-structural, statistical and modeling methods were used. The result of the research is the development of a search system presented in the article in a new format, allowing local governments to systematize the transfer of experience, taking into account the specifics and potential of municipalities located in the territories where Rosatom State Corporation operates.

Algorithm for Monitoring and Predicting the Functional Stability of Complex Information Technology Systems

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Key words and phrases: stability; system; algorithm; control; forecast.

Abstract: The purpose of the study is to consider the features of the algorithm for monitoring and predicting the functional stability of complex information technology systems. The article examines the current problem of monitoring and predicting the functional stability of complex information technology systems, which find their application in a wide variety of areas of the economy, industry and public life. As one of the important solutions to the identified problem, the article describes an algorithm developed by the author, which works in linear time for graphs with a small tree width. On the theoretical side, low tree-width graphs are the most general family of networks for which the stability prediction problem is solved in polynomial time. From a practical point of view, the algorithm is a simpler and more understandable solution; it is not difficult to implement in real conditions.

Design of an Automated Quality Control System

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Key words and phrases: automated system; design; quality improvement; information processing.

Abstract: The study presents the design of an automated system for step-by-step quality control at an enterprise associated with the woodworking industry. This SSL system will reduce material and time costs for employee work; increase the quality and quantity of information transmitted to the peeling machine worker, thereby improving and simplifying the analysis of the current state of the peeling machine; improve the quality of collection, processing and presentation of information: reducing the time for processing and obtaining operational data, increasing the degree of reliability of information processing, convenient presentation of the received data (in the form of graphic drawings with explanations).

Methodology for Creating an Electronic Archive of an Industrial Enterprise

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Key words and phrases: electronic archive; electronic copy of a paper document; electronic document; paper design documentation; digitization of paper design documentation.

Abstract: The article aims to summarize the existing methods and procedures for creating electronic documents at an industrial enterprise and to propose a solution to the problem of creating an electronic archive as a unified process for managing the storage of electronic design and technical documentation. The creation of an electronic archive is considered as a single set of procedures and activities for the generation and processing of information in the form of electronic documents, their attributes and relationships in the process of placement in an electronic archive based on the use of a product life cycle management information system and the electronic structure of the product. The presented methodology for creating an electronic archive is adapted to the specific needs and characteristics of an industrial enterprise, as well as compliance with legal requirements and ensuring data security. Based on these approaches, specific experience in organizing the formation of an electronic archive of design and technical documentation at an industrial enterprise is presented in relation to design and technical documentation.

Multi-Stage Problem of Placing Labor Resources in the Learning Process

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Key words and phrases: mathematical modeling; multi-stage problem; labor resources; training. Abstract: This article examines the problem of placing labor resources in the learning process, which generalizes the simplest placement problem in various directions, since it has many properties similar to those of the simplest problem. The class of tasks under consideration is distinguished by the presence of several levels of process through which resources pass before reaching the consumer. The goal of the study is to develop a mathematical model for solving the multi-stage problem of placing labor resources in the learning process. The objectives include mathematical formalization of the process of training labor resources; application of the method for constructing an approximate deadlock solution. The constructed dead-end solution allows for a feasible solution to the problem. The ongoing research into solving the multi-stage problem of placing labor resources in the learning process relates to the results of the work.

Model and Algorithm for the Formation of Many Spatially Distributed Groups of Air Objects

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Key words and phrases: spatially distributed groups; counteraction complex; set; clusters.

Abstract: One of the ways to increase the efficiency of the functioning of ground-based systems for countering spatially distributed groups of airborne objects (SDGAO) is the creation and improvement of automatic and semi-automatic control systems that ensure maximum implementation of the capabilities of the countermeasure complex. The purpose of this article is to develop models and algorithms for the formation of a set of SDGAOs. The synthesized algorithm and models, the correct operation of which was verified in SimInTech, made it possible to obtain many clusters of air objects and proceed to the formation of the optimal trajectory of movement of the rotary device of the countermeasures complex.

Updating the Algorithm for Modeling the Vibroacoustic Impact of Block-Modular Roof Boiler Houses in the STARK ES Software Package

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Key words and phrases: dynamics; impacts; STARK ES; algorithm; vibration; vibration velocity; vibration displacement; roof boiler houses.

Abstract: The paper presents an updated algorithm for modeling the vibroacoustic impact of block-modular rooftop boiler houses in the STARK ES software package, summarizing known and updated methods for modeling the vibroacoustic impact on building structures and floors from the engineering equipment of rooftop boiler houses. The objective of the study is to predict the vibroacoustic impact from engineering equipment in order to assess the sound insulation of building structures of rooftop boiler houses for the subsequent preparation of technical documentation intended for the construction of residential buildings.

The algorithm presented in the article has been tested in practice and allows, in laboratory conditions, using computer modeling, to carry out research related to the assessment of sound insulation of building structures and vibroacoustic effects from the engineering equipment of a roof boiler room (setting dynamic effects from the equipment) on the building's roof slab in the STARK ES software package. Modeling, as a method of repetition, allows you to increase the variability of action when conducting experiments for the purpose of subsequent recording of data.

Numerical Study of the Parameters of a Helicoidal Rotor of a Hydrokinetic Turbine

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Key words and phrases: screw turbine; pico-hydroelectric power station; Archimedes turbine; numerical modeling; screw turbine.

Abstract: The purpose of the research is to study the optimal shape of the helical rotor stage of a hydrokinetic turbine relative to the developed torque. The research hypothesis is to increase the torque by adding additional elements to the helical surface of the rotor. The objective of the research is to carry out hydrodynamic modeling in the Ansys CFX software module for rotors with different stage profiles. It was revealed that the most efficient rotor is with parabolic stage profiles, which is mainly caused by an increase in the area of the rotor's working area.

Integrated Functioning of the Work of Consulting Engineers for Project Management in Construction

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Key words and phrases: investment and construction project; project management in construction; engineering; consulting.

Abstract: Within the framework of a specific investment and construction project, practical engineering is professional services of a research, design, production and technological nature. The purpose of the research o is to study the issues of engineering and consulting in construction, the application of model laws on engineering and engineering activities in construction, questions about the need for engineering consulting services for project management in construction. In the study itself, the following tasks were set and completed: the need to introduce engineering and consulting services for project management in construction was identified and justified. The results of the study are a developed algorithm for the integrated functioning of the work of Russian consulting engineers in construction.

Prospects for the Use of Prefabricated Buildings for Sustainable Development of the Construction Industry (Chinese Experience Analysis)

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Key words and phrases: civil engineering; sustainable development; prefabricated construction; monolithic construction.

Abstract: The paper presents the results of an analysis of the Chinese experience in the construction of prefabricated buildings, showing the comprehensive advantages of the large-scale use of prefabricated housing construction as an important element in the development of the Chinese construction industry. The objectives of the study were: the analysis of the policy of the Chinese Government to stimulate the development of prefabricated construction, assessment of the advantages of prefabricated construction compared to monolithic construction according to a number of criteria: economic, environmental and social sustainability. The hypothesis of the study is the assumption that prefabricated construction meets the requirements of sustainable development of the construction industry to a greater extent than monolithic construction. It is shown that the use of prefabricated construction technology not only increases the comprehensive efficiency of construction processes, but also reduces the negative impact of construction sites on the city's ecology.

The Influence of Architectural Forms on People

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Key words and phrases: architecture; geometry; form; perception of architecture; single-strip hyperboloid; hyperboloid; construction.

Abstract: The purpose of the research is identification of patterns of perception of geometric forms in architecture and forecasting the further vector of development of architectural forms. The methods are analysis of studies and existing facilities. The study resulted in creating pattern of perception of architectural forms. It is concluded that by analyzing literature and objects, we identified the relationship between forms in architecture and the human condition, and also analyzed some other features of forms.

Review of Differences in Renovation Programs for Mass Industrial Housing Construction under Mayors Luzhkov and Sobyanin

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Key words and phrases: renovation program; difference in renovation programs; renovation of Moscow; reconstruction; operational indicators; Moscow housing stock; Mayor Luzhkov; Mayor Sobyanin.

Abstract: There are two main ways to improve the living conditions of Moscow residents, many of whom have been living in so-called "Khrushchevka" buildings for many years. One of them is to carry out reconstruction work on existing buildings and modernize the surrounding areas, as a result of which the operational performance of residential buildings is improved, the life of the housing stock is extended, while simultaneously improving the quality of life of the residents of these houses. In this article, we will focus on the second method of solving the issue of improving the living conditions of Muscovites living in dilapidated five-story buildings. This is the demolition of these buildings, which have no historical value, with the subsequent relocation of their residents to new apartments in newly erected apartment buildings. As part of this program, which is unprecedented in its scale and funding, many residents of the capital should improve their living conditions, and the overall urban environment will change towards greater safety and comfort.

The purpose of this article is the author's analysis and scientific understanding of various renovation programs for mass industrial housing construction under mayors Luzhkov and Sobyanin.

The tasks set by the author in this article are to analyze the renovation program under Mayor Yuri Luzhkov; to conduct an analysis of the renovation program under Mayor Sergei Sobyanin; to conduct a comparative analysis of the differences in the renovation programs of mass industrial housing construction under two mayors of Moscow.

The research hypothesis is as follows: the renovation program under mayors Sobyanin and Luzhkov has certain positive and negative aspects, which were implemented under each of these mayors. Research methods: historical, dialectical research methods. The scientific novelty of the article lies in the fact that during the analysis, it was established that renovation as such does not carry any negative connotations. Its defining objects and methods are those that were used under Yu. Luzhkov and S. Sobyanin. Renovation itself is a global practice and a necessity in the conditions of the city of Moscow. Renovation processes are an integral part of the development history of any city. This allows us to improve the living environment of citizens and improve the level of comfort of their living. Renovation makes it possible to improve urban infrastructure, intensify efforts to build new roads, create park areas and public gardens. These and other improvements, in turn, have a positive impact on the city's real estate market.

Ancient Traditions in the Urban Planning of St. Petersburg and Washington

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Key words and phrases: Ancient urban planning; Hippodamian planning; French architectural school of the 17th century; urban planning schemes of St. Petersburg and Washington.

Abstract: The purpose of the article is to analyze the influence of ancient planning schemes on the development of St. Petersburg and Washington. The objective of the work is to consider the history of the emergence of the main type of Greek urban planning – the so-called "Hippodamian" layout. The hypothesis lies in the assumption that the semantic ideas of beauty, formed in various fields of ancient science, found their embodiment in urban compositions. Methods used: comparative analysis of data from archaeology, philosophy, history of architecture and urban planning in relation to the two capitals. Achieved results: the compositional ideas of urban planning schemes of St. Petersburg and Washington were determined in the context of the ancient theory of Hippodamus.

Waste Sorting and Recycling Facilities in Russia

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Key words and phrases: waste sorting facilities; waste recycling facilities; sustainable architecture; industrial architecture; ecology; Russia.

Abstract: The article publishes the results of the research work "Principles of urban planning and architectural planning organization of waste sorting and recycling facilities in Russia", carried out as part of a competition for grants of research works by scientific and pedagogical workers of St. Petersburg State University of Civil Engineering in 2023. Research hypothesis: modern approaches to the design of industrial buildings in Russia require modernization taking into account the principles of sustainable architecture. The purpose of the research is to identify the architectural features of existing waste sorting and recycling facilities in the country. The tasks were set to study the experience of creating waste sorting and recycling facilities in Russia, to give recommendations for modernizing approaches to designing these facilities taking into account sustainable development. To achieve the set objectives, the method of complex analysis was used. As a result of the study, the features of architectural, planning and compositional solutions, as well as shaping and figurative components, were identified, recommendations were given for the further development and modernization of approaches to the design of waste sorting and recycling facilities in the country.

Sustainable Development of Coastal Areas

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Key words and phrases: public autonomous institutions; parkland management; conservation; access; community participation; sustainable management; science and education; risk management; climate change adaptation; visitor management.

Abstract: The article examines the role of government autonomous institutions (GAU) in the management of park areas. A method was chosen to analyze the organizational structure of the State Agrarian University and the key principles of park management, including conservation, access, community participation and sustainable management. The outcome will highlight the importance of science and education, risk management and adaptation to climate change, and visitor management in the context of parkland management.

Sustainable Development of Territories of Industrial Zones in Urban Planning

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Key words and phrases: adaptation of industrial territories; industrial architecture; industrial zone; refunctionalization of industrial territories; sustainable development of the city.

Abstract: The purpose of this study is to analyze methods and identify features in the refunctionalization of industrial territories. The objectives of this paper include studying domestic and foreign urban planning examples of adaptation of industrial zones, which reflect various modern approaches to solving the most pressing issues related to the reuse of former industrial areas; analyzing the basic principles of a competent approach to the implementation of sustainable development of urban space. As a hypothesis, it is proposed to identify 8 criteria that must be taken into account when constructing use scenarios in the process of adaptation of industrial territories and industrial heritage sites. The work uses scientific research methods and their synthesis. The result of the study is the use

of a system based on the selection of one of the basic criteria for a competent approach to sustainable development of the territory, which will create the most thoughtful structure for solving the re-adaptation of industrial zones.

The Essence and Role of Cultural and Historical Events in the Social Education of Preschool Children

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Key words and phrases: cultural and historical event; preschoolers; social education; attitudes; spiritual settledness.

Abstract: The issue of the essence and role of cultural and historical events remains relevant in the social education of preschool children. By mastering the culture and history of their native land and country, children transform them in their own creative activities, filling them with their own meaning. The purpose of the article is to analyze the essence and role of cultural and historical traditions in the social education of preschool children. The reliability and validity of the results obtained is ensured by a theoretical analysis of scientific literature, methods of analysis and synthesis, and an integrative approach. As a result of the study, the author came to the conclusion that the implementation of the socio-pedagogical potential of cultural and historical events in the conditions of a preschool educational organization allows them to develop spiritual and moral resistance to the influence of other cultures, spiritual and moral settledness, and a sense of attachment to their native places. Their use in the educational process changes the goal of social education of preschool children.

Creativity in the Professional Sphere: Studying the Ideas of Future Translators about its Essence and Meaning

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Key words and phrases: translation; creativity; future translator; learning process; language.

Abstract: The purpose of the study is to identify the attitude of future translators to creativity in translation activities and their understanding of its essence. The goal was achieved in the process of solving problems: studying theoretical literature; conducting a confirmatory experiment; analysis of empirical data. To test the hypothesis that future translators are aware of the importance of creativity and clearly understand its essence in relation to translation, a survey was conducted among students who were future translators. Methods of quantitative and qualitative data processing made it possible to identify a number of contradictions indicating the lack of students' knowledge about creativity in translation.

Orthodox Tradition as the Basis of Spiritual Education in the Digital Civilization of Russia

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Key words and phrases: Orthodox tradition; digital pedagogy; theology; education; digital culture. Abstract: The Orthodox tradition has its own history and forms of existence. Today we are witnessing the emergence of digital civilization as a new stage in the development of the information society. During the period of all previous civilizations, Orthodoxy was the core of culture, preserving

its tradition. Under certain conditions, it underwent transformations, adapting to certain sociocultural conditions. At the same time, society also changed, as a rule, in a technological sense it was progressive, but in a spiritual sense there was regression. A similar situation has developed in Russia today. The main research methods are the method of analytical review, comparison, and generalization. In the course of the study, the authors come to the conclusion that in order to determine the ways of the spiritual revival of Russia as a state and as a civilization in the conditions of the modern spiritual crisis, it is necessary to study the principles of preserving the Orthodox tradition in the conditions of digital civilization.

Formation of Family Values in Native Literature Lessons

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Key words and phrases: family values; native literature; cultural approach; literature lesson; research method.

Abstract: The analysis of modern scientific research and educational and methodological developments shows that the effective formation of value attitudes when teaching literature is facilitated by the use of a cultural approach. Therefore, the purpose of the article is to show the possibility of using a cultural approach in the formation of family values in native literature lessons. To achieve the goal, the article presents a number of methodological recommendations aimed at solving problems of an educational, communicative, educational nature. The authors used a set of methods: analysis of scientific and pedagogical sources on the problem of forming family values among students; retrospective method and generalization method. It is shown that such techniques within the framework of the cultural approach as using works of painting and architecture as a comparative context for interpretation; holding an exhibition dedicated to the family; organizing such a form of interaction as family gatherings allows us to develop a value-based attitude towards culture and family traditions. The chosen methods and techniques are determined by the educational task and the age characteristics of the students.

Literary Quiz as an Effective Method for Developing Students' Reading Culture

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Key words and phrases: reading; reading culture; literary quiz; visualization of literary images.

Abstract: The purpose of the article is to determine the advantages of using a literary quiz in the formation of students' reading culture. The objectives of the article are to establish the dominant role of reading in the development of personality at the physical, cognitive and metaphysical levels; identifying the main range of problems in the formation of the readership. The research hypothesis is based on the assumption that the use of a literary quiz as an innovative technique that provides visualization of literary images allows students to integrate into a visual culture that is understandable to them. Based on the results of a theoretical study, the author concluded that the literary quiz is unambiguously effective in developing students' reading competencies.

Study of the Influence of Distance Learning in Physical Education on the Health Status of Medical Students

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Key words and phrases: physical education; health; physical activity; distance learning; students.

Abstract: The purpose of the study was to analyze the anthropometric indicators of students before and after the transition to distance learning in conjunction with an assessment of the dynamics of students' perception of their own physical condition. The objective of the study is to increase the level of physical fitness of students in the conditions of distance learning. The study assumed that students taking additional physical education would increase these indicators. The research methods include testing, observation, pedagogical experiment, mathematical data processing. The study revealed a significant decrease in the physical activity of students engaged in distance physical education, and as a result, their health condition worsened.

Features of the Implementation of Psychological, Pedagogical and Social Measures Promoting the Resocialization of Convicts

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Key words and phrases: educational work; convict; psychological work; preparation for release; post-penitentiary support; resocialization; social adaptation; social work; employee; penal system.

Abstract: The purpose of this article is to reveal the role of educational, psychological and social work with convicts in their resocialization, to consider the causes of difficulties in social adaptation. The objectives of the article are: to reveal the concept of resocialization of convicts, to highlight the main activities of an educational, psychological and social nature in preparation for release. The hypothesis of the article: the effectiveness of educational, psychological and social work during the period of preparation for release depends on the activities of correctional institution employees, whose tasks are the implementation of psychological, pedagogical and social measures that promote the resocialization of convicts and minimize the difficulties of post-penitentiary adaptation. Using methods of theoretical analysis, observation and questioning, the authors of the article emphasize the role of psychological, pedagogical and social work in post-penitentiary support of convicts.

Key Indicators of the Effectiveness of Teaching Activities of Correctional Institution Employees

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Key words and phrases: adaptation features; educational work; communicative features; convict; pedagogical activity; professional activity; pedagogical abilities; styles of interpersonal interaction.

Abstract: The purpose of this article is to reveal the indicators of the effectiveness of the pedagogical activities of employees carrying out educational work with convicts. The objectives of the article are to study the psychological and pedagogical components of the professional activities of educators, to determine the level of development of constructive styles of interpersonal interaction. The hypothesis of the article is as follows: the main indicators of the effectiveness of the teaching activities of teaching staff are a high level of development of psychological and pedagogical components, adaptive and communicative personality traits and constructive styles of interpersonal interaction. Using methods of theoretical analysis, observation, questioning and psychodiagnostics, the authors of the article identified the external and internal components of successful professional activity.

Modernization in the Countries of the East (on the example of Turkey and China in the 1920s–1930s): Features of Study in Educational Institutions

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Key words and phrases: modernization; East; interwar period; Turkey; China; history lesson.

Abstract: The article analyzes the content and methodological features of studying in Russian schools the phenomenon of modernization in Asian countries of the interwar period, in the 1920s–1930s. The Kemalist revolution in the Turkish Republic and the modernization course of the Chinese dictator Chiang Kaishek are taken as examples. Both of these modernization options are taught in senior classes of general education organizations of the Russian Federation, in lessons on the Contemporary History of Foreign Countries. The research objectives are to conduct a comparative analysis of modernization in Turkey and China in the 1920s–1930s, as well as to identify the content and methodological features of teaching these models of modernization in history lessons. The research hypothesis is the assumption that modernizations in Asian countries, including Turkey and China, were initially aimed at achieving and strengthening their own sovereignty and, to a certain extent, independence from the West. For modern Russia, this experience in the current situation is certainly useful, including in the format of assimilation of this experience by our younger generation in school history lessons. The study identified historical and sociocultural features of modernization in Asian countries of the interwar period in the context of teaching this topic in educational institutions in Russia.

Features of the Formation of Prosocial Behavior in Schoolchildren

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Key words and phrases: prosocial behavior; personal determinants of prosocial behavior; activation of prosocial behavior.

Abstract: The purpose of the study is the analysis of the characteristics of a person's prosocial behavior as a phenomenon affecting its interaction in the system of not only social, but also moral, humane relations, reflecting one of the social values of promoting and helping other people. The objectives are consideration of the main approaches to describing the essential characteristics of prosocial behavior; analysis of personal determinants of prosocial behavior and the possibilities of its activation. The research methods include analysis, synthesis, and generalization. The results are as follows: the main approaches to describing the essential characteristics of prosocial behavior are considered; personal determinants of prosocial behavior and the possibility of its activation are analyzed.

Features of the Information Culture of Medical Students

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Key words and phrases: information culture; medical student.

Abstract: The paper characterizes the features of the information culture of medical students. The goal is to characterize the factors influencing the dynamics of the information culture of medical students. The research objectives are characterization of the connection between information culture and professional culture, differentiation of the concepts of information culture, literacy and competence, formation of a list of factors influencing the content and dynamics of the information culture of medical students. The method of comparative analysis was used. The hypothesis is that there are factors that influence the content and dynamics of the information culture of medical students.

Mobile Applications as a Means of Implementing a Healthy Lifestyle

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Key words and phrases: healthy lifestyle; mobile applications; students.

Abstract: This article analyzes the concept of "healthy lifestyle" and identifies the components included in this concept. A connection has been established between mobile applications and the implementation of a healthy lifestyle of a modern person. The purpose of the study is to identify popular and accessible mobile applications for maintaining a healthy lifestyle for students through comparison, as well as to find out students' opinions on the use of such applications in everyday life. The main research methods are comparative analysis, theoretical analysis and synthesis of scientific and methodological literature, questioning. The results of the study allow us to draw conclusions that the concept of a "healthy lifestyle" today must include a spiritual component. Mobile applications, according to respondents, are useful for implementing a healthy lifestyle, and are also systematically used by them. Also, mobile applications in this area are recommended for use not only independently, but also in the process of educational activities within the discipline "Physical Culture and Sports".

Health Diary – A Motivator of Self-Control for Students Exempt from Practical Classes in Physical Education

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Key words and phrases: health diary; health; motivation; released students; self-control; student; physical education.

Abstract: this article examines the issue of lack of motivation to monitor their health among students exempt from practical classes in physical education. The results of a survey among students of Petrozavodsk State University are presented. Purpose of the work: to determine the degree of awareness among students to control their health, and also to introduce the use of a specially designed health diary into the life activities of students exempted from practical classes in physical education, with the help of which to motivate them to consciously control their health. Research methods consist of a theoretical review and synthesis of scientific and methodological literature, questionnaires.

Tempo-Step Values of Swimming Technique of Elite Sprint Swimmers

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Key words and phrases: swimming; swimming pace; swimming stride; elite swimmers; sports performance.

Abstract: The purpose of the study was to develop practical recommendations for the use of tempostep values for elite sprint swimmers. The objectives of the study included determining the tempostep values of the swimming technique of elite male and female sprint swimmers. The hypothesis of the study was the assumption that determining the tempostep values of elite sprint swimmers will help to determine ways to further improve swimming technique and increase athletic performance. The object of study is a swimming technique of elite sprint swimmers. The subject of study is tempostep values of swimming technique of elite sprint swimmers. The research methods are analysis and synthesis of scientific and methodological literature, analysis of the competitive activity of elite sprint swimmers, analysis of video materials and competition reports, methods of mathematical statistics. The results of the study showed that from 2008 to 2020, elite 50 m freestyle swimmers experienced a decrease in

swimming speed and an increase in stride length. At the same time, during the period we studied, male sprint swimmers' sports results did not change significantly, while female sprint swimmers showed an improvement in sports results.

Digitalization of Higher Theological Education: Problems and Prospects

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Key words and phrases: digital pedagogy; theology; education; higher education; digital culture.

Abstract: Digitalization of the educational space is a necessary process today. Theological education is no exception. However, when transferring it to the digital space, a number of problems arise: the problem of creating digital content, the problem of implementing distance forms of education, the problem of developing ICT competencies of graduates, etc. The main research methods are: analytical review method, comparison, generalization. This article is a continuation of the development of the direction "digitalization of higher education", carried out earlier by the authors. In the course of the study, the authors come to the conclusion that the main problems and contradictions of the digitalization of higher theological education form a number of trends in its development: integration of secular and religious components within a single digital space, increasing academic mobility of teachers and students, development of a system of continuous and additional theological education.

Theology in a Digital Context and Its Role in the Socialization of an Individual

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Key words and phrases: tradition; theology; education; digital socialization; digital culture.

Abstract: Theology in modern Russia is recognized as a scientific specialty. It has the same requirements as any scientific discipline. Digitalization of the modern sociocultural space, all spheres of public life, creates new conditions for the socialization of the individual. Theology as a science, as a type of worldview, is included today in the process of socialization of the individual, transmitting the spiritual values of confessional traditions. The digitalization of theology for modern culture is necessary, but a number of contradictions arise that require comprehension and development of solutions to emerging problems. The main research methods are the analytical review method, comparison, and generalization. This article is a continuation of the development of the areas of "information cultural studies" and "digitalization of higher education" carried out by the authors. In the course of the study, the authors come to the conclusion that the digital turn in theological science is necessary, but the translation of the confessional tradition is of particular importance, provided that its core is preserved, containing spiritual values as the basis of modern culture.

Model of Teacher Training for Inclusive Education of Children in the System of Additional Professional Education

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Key words and phrases: children; model; teacher; preparation; inclusive education; additional professional education.

Abstract: The purpose of the study is to reveal the author's model of preparing teachers for the

inclusive education of children in the system of additional professional education. The objectives are to argue the relevance of the problem under study; to substantiate a model for training teachers in the additional education system for inclusive education of children. The research hypothesis is based on the assumption that the success of inclusive education of children depends on the professional training of teachers for this process in additional education systems. The research methods include analysis, synthesis, observation, survey, comparison, generalization, and conversation. The results are as follows: with the implementation of the teacher training model in the system of additional professional education, the inclusive education of children with disabilities has improved.

The Influence of Educational Work on Post-Penitentiary Adaptation of Female Prisoners

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Key words and phrases: correctional prison; female convicts; educational work; psychological characteristics; pedagogical process; forms and methods of work; post-penitentiary adaptation.

Abstract: Educational work carried out with female convicts while serving a sentence of imprisonment has a positive impact on their post-penitentiary adaptation, and therefore, in this article, the author analyzes its main directions, taking into account the characteristics of this category of convicts. In this paper, methods of scientific research were used, as well as general scientific methods, which made it possible to achieve the set goals and objectives, identifying the most effective and modern methods of educational work.

Competence Aspects of Psychologists in External and Internal Factors of Self-Destructive Behavior of Convicts

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Key words and phrases: competence aspects; self-destructive behavior; conflict; condemned; critical incident; life situations; suicidal behavior; destructive behavior.

Abstract: The purpose of the article is to identify the main external and internal factors contributing to the manifestation of self-destructive, that is, self-destructive behavior of persons sentenced to serve a criminal sentence. This goal contributed to the definition of a number of tasks: revealing the content of typical factors contributing to the manifestation of suicidal behavior of convicts; establish the conditions that ensure the formation of the above factors; carry out a comparative analysis of psychometric profiles of suicide victims; determine the typical personality profile of a convicted person who committed suicide. The methods used in the study included participant observation, as well as analysis of existing scientific and methodological literature on the problematic issue. Based on the results of the study, a list of external and internal factors of self-destructive behavior of convicts was compiled, which is one of the main elements of the competence of psychologists in working with convicts.

Teaching the Discipline "Inorganic and Analytical Chemistry" to Foreign Students

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Key words and phrases: English language; foreign students; inorganic and analytical chemistry; English-speaking students; teachers.

Abstract: The article touches on the topic of teaching the discipline "Inorganic and Analytical Chemistry" in English to foreign students and analyzes the experience of teaching this discipline. Some difficulties that foreign students encounter when studying the subject are considered, and positive and negative aspects that arise in the process of studying inorganic and analytical chemistry are also noted. The author offered the opportunity for teachers to participate in round tables and conferences to increase the level of theoretical knowledge and improve practical skills and abilities.

Social and Pedagogical Partnership in the Context of the Formation of a Unified Educational Space for Teacher Training

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Key words and phrases: teacher training; socio-pedagogical partnership; common educational space; participatory approach.

Abstract: The purpose of the study is to substantiate the key characteristics of the use of a participatory approach in organizing socio-pedagogical partnerships in a single space of higher pedagogical education. In accordance with the goal, tasks have been identified – to study research in the field of application of the participatory approach in the education system, to analyze the practice of implementing partnerships in education, to determine the features of the participatory approach. The hypothesis is that based on a participatory approach the organization of socio-pedagogical partnership will be more effective if the key characteristics of the approach are identified. The results of the study are the key characteristics of the application of the participatory approach in the conditions of socio-pedagogical partnership in a single educational space for teacher training.

Pedagogical Aspects of Preparing University Students for a Demonstration Exam

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Key words and phrases: higher education; demonstration exam; preschool education; competence approach.

Abstract: The purpose of this article is to identify the main aspects of preparing students of the "Preschool Education" profile for a demonstration exam as an intermediate form of monitoring knowledge and skills. The objectives of the study are to reveal the place and significance of the demonstration exam in the training of specialists for the preschool education system, to identify difficulties in its organization. The research method was the analysis and description of teaching experience. As a result, the authors present the directions (aspects) of student training: organizational, pedagogical, methodological and psychological aspects. The content of work with students on each aspect is revealed.

Opportunities for Developing Soft Skills in Pedagogical Students

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Key words and phrases: soft skills; hard skills; future teacher; student; university; vocational training; formation of flexible skills.

Abstract: The article discusses the problem of developing soft skills in students of pedagogical

areas of training, the relevance of which is due to the need for modern university graduates to comply with the new realities of digitalization. A definition of soft skills is given, their difference from hard skills; synonymous concepts used in modern literature are listed. The author has identified groups of various personality traits and skills that act as soft skills; methods and forms of active and interactive learning are indicated within the framework of purposefully organized individual and team work to develop soft skills in students of pedagogical areas of training. The author comes to the conclusion that the development of soft skills in students of pedagogical areas of training is an important task, because These universal meta-subject educational results contribute to the rapid adaptation of young specialists and the productive performance of their professional functions. All this together allows us to talk about the competitiveness and high qualifications of graduates, their demands in the modern labor market.

Forming the Readiness of a Future Teacher to Work with a Disharmonious Family Using Case Technologies as a Modern Pedagogical Problem

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Key words and phrases: bachelor student; future teacher; formation of readiness to work with a disharmonious family; university; vocational training; family; disharmonious family; case technology.

Abstract: The article is aimed at solving an urgent pedagogical problem, which is the need to determine and scientifically substantiate the theoretical and methodological foundations for developing the readiness of a future teacher to work with a disharmonious family in accordance with the needs of society in increasing the cultural and educational potential of a modern parent. The author examines the essence, principles and stages of the process of developing future specialists' readiness to work with a disharmonious family, formulates the goal of the research – scientific substantiation of the advantages of using case technologies in the process of developing the readiness of a future teacher to work with a disharmonious family. The following objectives are set: to determine the content and structural components of a teacher's readiness to interact with a disharmonious family. The research methods are analysis of psychological, pedagogical, sociological and legal literature, interpretation. The result of the study is that the formation of a future teacher's readiness to work with a disharmonious family in the educational space of a higher school includes three stages: diagnostics, educational work, and reflective activity. Theoretically important and new in content is the solution to the issue of identifying four components of a future teacher's readiness to work with a disharmonious family, as well as pedagogical conditions that contribute to the successful completion of this process.

Study of a Model for Training Applied Bachelor's Degree Specialists at an Industrial University

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Key words and phrases: applied bachelor's degree; higher education; Russia; China; training of specialists; employment of graduates.

Abstract: The article is devoted to reflecting the characteristics of the training of students in higher educational institutions. The purpose of the work is to define the concept of "applied bachelor's degree" and study the model for training future specialists. The practical significance of the article lies in the fact that the results of the work can be used in the training of future specialists in Russian and Chinese universities. The author reflects two models of training specialists in applied bachelor's degree: on the basis of secondary vocational education and on the basis of universities. A feature of the applied bachelor's degree is the predominance of practical classes, educational and industrial practice, close cooperation with the enterprise and the opportunity to find a job after receiving a diploma.

The Growth Rate of Swimmers' Sports Results in the Zone of the Highest Results of Long-Term Training at the Present Stage of Development of Sports Swimming

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Key words and phrases: growth rate; long-term training; sports performance; swimmers; zone of highest results.

Abstract: The study aims to offer practical recommendations for planning the process of long-term training in swimming using the established growth rates of sports results in the zone of the highest results of long-term training among swimmers of all specializations at the current stage of development of sports swimming. The research methods are theoretical analysis and synthesis of scientific and methodological literature data; analysis of protocols of international competitions; analysis of statistical materials of the International Swimming Federation (FINA); monitoring the official website of the 2016 Olympic Games in Rio de Janeiro; calculation methods; extrapolation; methods of mathematical statistics. The results of the study showed that the maximum increase in sports results in women at the stage of maximum realization of individual capabilities was recorded at distances of 50 m freestyle and 200 m breaststroke. For men, such progress was possible only at one distance – 1,500 m freestyle. The minimum progress at this stage was recorded for women at a distance of 200 m backstroke, and for men at a distance of 100 m freestyle. The lowest growth rates at the stage of maintaining achievements in women and men are also observed at these distances. High rates of growth in sports results at a distance of 50 m freestyle were determined, recorded for both women and men. Moreover, this is observed both at the stage of maximum realization of maximum capabilities and at the stage of maintaining the highest sportsmanship.

On the Problem of Developing Social and Preventive Competence of a Social Worker to Prevent Violence against Children in the Family

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Key words and phrases: social work; family violence against children; social and preventive competence.

Abstract: The purpose of the study is to determine ways to develop the social and preventive competence of a social worker to prevent violence against children in the family. The objectives of the study are to identify the content and structure of the socio-technological competence of a social worker, to suggest ways of its formation. The research hypothesis is as follows: identifying the components of social and preventive competence will allow us to determine the content of training future specialists for this activity. The research resulted in developing the content of training future social work specialists for the prevention of family violence. The research methods are inductive-deductive analysis of regulations and sources.

On the Problem of Preserving the National Culture of the Orochon People

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Key words and phrases: preservation of national culture; Orochon people; protection of the culture of the Orochon people.

Abstract: The protection of the culture of the Orochon people and its heritage is in crisis, and

due to changes in their way of life, many traditional cultural phenomena are gradually disappearing. The purpose of this article is to analyze the problems and factors affecting the preservation of the heritage of the national culture of the Orochon people. The achieved results of this article are the development of strategies for preserving the folk culture of the Orochon people. The study presents a new perspective on the preservation and development of minority culture. The combination of theory and practice is the main method of this article.

Formation of Interest in Reading among Younger Schoolchildren in the Works of Yakut Writers in the Process of Family Reading

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Key words and phrases: primary schoolchildren; reader interest; Yakut language; experimental; research.

Abstract: The purpose of the article is to reveal the role of family reading in the formation of reading interest among primary schoolchildren in the works of Yakut writers. The hypothesis is that the development of reading interest among primary schoolchildren in the works of Yakut writers will be carried out more effectively if joint projects are carried out for children and parents that promote family cohesion and unity based on family reading. During the research, methods of observation, conversation, questionnaires and surveys were used. As a result of the experimental work, it can be noted that parents, when reading together with their children, not only instill an interest in reading, but also help preserve the Yakut language and culture.