

ABSTRACTS Information about the authors

Adaaaptive method of predicting student performance

S. S. Moyseenko – Baltic Fishing Fleet State Academy of Kaliningrad State Technical University, Russia

Annotation. A methodology for predicting student academic performance based on the use of probability theory methods is presented. The system "students-learning process" is considered. It is shown that the possible states of the system under consideration can be investigated using the theory of Markov processes. An algorithm for implementing the forecasting methodology based on the use of the theory of Markov processes is presented. An example of the implementation of the methodology is presented.

Keywords: system, predicting, student, methodology, Markov processes, methods

On the role of additional education and career guidance in the formation of human capital

N. G. Chistova – doctor of technical sciences, professor

A. A. Narinyan – candidate of philosophical sciences, associate professor

R. S. Chistov – candidate of philosophical sciences, associate professor

Annotation. Based on the fact that human capital is a person's ability to transform information into knowledge, and knowledge into practical activity, the work postulates the special significance of the educational component as a whole in its structure. The issue of the content and vector of development of additional education and professional orientation in modern Russia in the context of the formation of human capital is considered. Additional education should provide access to the child's mastery of the main semiotic systems throughout all stages of his life cycle, and a wide range of realized abilities and interests of the younger generation should, in turn, form the basis for their perception of social values and inclusion in productive professional life.

Keywords: additional education, human capital, competence, professional training, education, upbringing, abilities, teaching practice, literacy, sign system, productive activity, self-determination, professional orientation

Prospects and Possibilities of Using Microlearning in the Corporate Training System

S. V. Savanovich – Kaliningrad State Technical University, Kaliningrad, Russia

Annotation. The article is devoted to the study of the possibility of introducing micro-education into the system of modern additional professional education within the framework of the long-distance corporate training format. Micro-education makes it possible to increase the flexibility of educational technologies used in the field of corporate education and to better meet the company's requirements regarding the qualifications and competencies of personnel.

Keywords: additional professional education, corporate training, micro-education, competencies, distance learning

Educational policy as one of the priority areas of development of the educational system

T. A. Vagabova – Doctor of Pedagogical Sciences, Associate Professor, Honored Teacher

Annotation. Education, being a strategically important sphere of activity of each state, determines the political, economic, social and cultural development of this state and forms the moral values of the newly emerging society. Therefore, each sovereign state pays special attention to the development of education. Speaking about the directions of development in all spheres of the Republic of Azerbaijan, which is experiencing the 21st year of its independence, one can see how transparent and understandable

these directions are. After gaining independence, in the process of searching for civilized, democratic models of building a new society, the integration of world experience in updating the education system has acquired a large scale. The development trend observed in all spheres of society, starting with the economic sphere, gives rise to optimistic ideas about the future of our country.

Keywords: educational system, educational policy, educational problems, educational strategies, moral values, globalization

Application of methods and models of system analysis to optimize the educational process of training specialists in land management

I. D. Rudinskiy – Doctor of Pedagogical Sciences, Professor¹

O. Yu. Li – Postgraduate Student²

^{1,2}Immanuel Kant Baltic Federal University, Kaliningrad, Russia

Annotation. The article is devoted to the application of methods and models of system analysis for optimization of the educational process of training specialists in land management. The main attention is paid to the "Decision Tree" method for analyzing students' test data and the "Input-Output" model for assessing changes in curricula. Based on real student testing data, the construction of a decision tree is demonstrated, its structure, algorithms and model quality metrics (accuracy, Gini index) are analyzed. The application of such approaches allows developing personalized recommendations for students, adapting the content of courses to their educational needs and, on this basis, improving the quality of training specialists.

Keywords: decision tree, system analysis, educational process, personalized recommendations, "Input-Output" model

Current aspects of organizing family education

N. A. Shobonov – D.Sc. (Pedagogy), Associate Professor. Professor of the Department of General and Social Pedagogy of the Federal State Budgetary Educational Institution of Higher Education "Kozma Minin Nizhny novgorod State Pedagogical University" (Nizhny novgorod)

Branch of the Private Educational Institution of Higher Education "Moscow University named after S.Yu. Witte" in Nizhny novgorod

N. O. Ablyazova – Ph.D. (Econ.) Branch of the Private Educational Institution of Higher Education "Moscow University named after S.Yu. Witte" in Nizhny novgorod

V. A. Chistyakov – Ph.D. (Sci.) Nizhny novgorod Institute of Railway Engineering - branch of the Federal State Budgetary Educational Institution of Higher Education "Volga Region State University of Railway Engineering" (Nizhny novgorod)

Annotation. The authors consider the issues of organizing family education as one of the forms of obtaining general education in the Russian Federation, which is currently becoming widespread. The article attempts to analyze federal legislation that determines the rights and obligations of participants in educational relations. The article formulates some problems of legal regulation of the organization of family education, the reasons why parents choose this form of education for their children, the risks and difficulties in organizing family education.

Keywords: education, family education, legal acts

Formation of economic competence of an engineer in an educational environment

I. K. Arintseva – Senior lecturer, Kaliningrad State Technical University, Kaliningrad, Russian Federation

Annotation. The article considers the problem of developing economic competence of students - future engineers, the relevance of which is determined by the widespread introduction of new technologies, which have led to the expansion of the spheres of professional activity of an engineer. The increasing complexity of modern engineering problems requires from young specialists not only deep technical knowledge, but also high economic literacy, which is becoming the most important aspect of the professionalism of an



engineer. Possession of the methodology of developing and making sound economic decisions in various areas of production contributes to the formation of a comprehensive understanding of technical and technological problems.

Keywords: university teacher, reforms of education, professional activity of an engineer, pedagogical environment, economic competence, professional technologies, higher technical education, structure of professional activity

On the issue of the development of physical culture

E. V. Matukhno – Candidate of Pedagogical Sciences, Associate Professor at the Department of Physical Education and Sports, Honorary Worker of Higher Professional Education, Associate Professor of the Department of Humanities and Natural Sciences of the Western Branch of the Russian Presidential Academy of National Economy and Public Administration

I. M. Tkach – Associate Professor, Associate Professor at the Department of Physical Education and Sports, Honorary Worker of Higher Professional Education, Associate Professor at the Department of Physical Education and Sports of Komsomolsk-on-Amur State University

Annotation. This article reveals the problem of identifying the historical essence of physical culture. According to the state, physical culture, having great potential opportunities, becomes the most important way to strengthen and preserve health, develop personal and professional qualities, improve a person's working capacity and level of motor activity. The authors draw a relationship between culture and physical culture, since along with culture as a whole, physical culture is designed to form a comprehensively developed personality, the main subject of the historical process. As a result of solving the problem, it was revealed that physical culture manifests itself in a variety of historically established and constantly developing new physical exercises. An in-depth study of the history of physical culture in the future may affect not only the physical condition of one individual, but also the future of modern society.

Keywords: culture, physical education, approach, music, literature, society, functions

The role of psychological and pedagogical classes in the career guidance work of a secondary school

- **I. A. Konopleva** Candidate of Technical Sciences, Associate Professor, Western Branch of the Federal State Budgetary Educational Institution of the Russian Academy of Sciences, Kaliningrad
- **A. V. Gerasimova** Ph. D. ped. sciences, associate professor, FGBOU IN SPbGTI(TU), St. Petersburg **V. S. Konopleva** Candidate of Economic Sciences, Associate Professor, Western Branch of the Federal State Budgetary Educational Institution of Higher Education, Kaliningrad
- **A. V. Prozorov** Ph. D. ped. sciences, associate professor, dep Educational and scientific cluster "Institute of Education and Humanities" Baltic Federal University named after I. Kant, Kaliningrad

Annotation. The article deals with the problem of creating psychological and pedagogical classes in general education schools: regulatory and legal aspects, tasks to be solved, requirements for enrollment of students, the content of specialized training, some results of the work of psychological and pedagogical classes, measures are proposed to increase the role of psychological and pedagogical classes in the career guidance work of a general education school.

Keywords: Keywords: psychological and pedagogical class, the concept of teacher training, individual project

The modern aspects of the formation of multifunctionality of future managers

T. M. Derendyaeva – Ph.D., ped. Sciences, Associate Professor, Kaliningrad State Technical University, Kaliningrad, Russian Federation

Annotation. The article substantiates that the formation and development of professional multifunctionality among future managers is a key success factor in today's continuously and unpredictably changing competitive conditions of the modern market. The author emphasizes that for the formation and development

of professional multifunctionality of young specialists in the field of management, it is necessary to form competencies reflecting the new requirements for their professional training. These requirements are related to the evolution of management functions, the globalization of industrial production, the digital transformation of the economy and the widespread introduction of innovative technologies, which creates the need to find ways to harmonize public demand and individual professional motivation of students.

Keywords: professional multifunctionality, education reform, educational work, research activities, the current knowledge, professional competencies, professional versatility, modern management roles

Formal and informal mentoring for teachers

Zh. V. Smirnova – Candidate of Pedagogical Sciences, Associate Professor, Nizhny novgorod State Pedagogical University named after Kozma Minin, Russia **A. A. Permovsky** – Senior Lecturer, Nizhny novgorod State Pedagogical University

named after Kozma Minin, Russia

A. V. Angel – Candidate of Pedagogical Sciences, Associate Professor, Nizhny novgorod State University named after N.I. Lobachevsky, Russia

Annotation. The article examines the mentoring process for teachers. Examples of formal and informal mentoring, its importance and advantages for both beginning and experienced teachers are given. The emphasis is on informal mentoring through associations, which are the leading direction through which innovative methods, techniques, tools and solutions are introduced into the pedagogical process.

Keywords: mentoring, professional adaptation, formal mentoring, informal mentoring, innovations in education

Analysis of trends in the personalization of additional professional education

E. S. Fontalina – IATE MEPHI, Obninsk, Russia, MPGU, Moscow, Russia

Annotation. The problem of this study is the definition of the concept of personalization in the context of additional professional education and the analysis of the main approaches and methods of personalization. This will make it possible to adapt the educational process to the individual needs of each trained teacher and psychologist, optimize the work of teachers and improve learning outcomes in general.

Keywords: personalization, supplementary education, learner

Implementation of the program "Advanced Engineering schools"

O. Yu. Khatsrinova – Kazan National Research Technological University, Kazan, Russia, khatsrinovao@mail.ru

Annotation. The issues of implementation of the program "Advanced Engineering Schools" are considered. The conditions for the implementation of this program are given on the example of the Department of Technology of Inorganic Substances and Materials FGBOU VO "KNRTU". The program of professional retraining aimed at teachers working in the programs of PISh is considered.

Keywords: student empowerment, advanced engineering schools, research and development, competence, digitalization

Intercomation of heuristic learning and readiness for self-development of higher education students

I. I. Kapalygina¹, S. Z. Semernik², E. N. Djukh³ –

^{1,2,3}Yanka Kupala State University of Grodno (Belarus)

Annotation. The proposed article reveals the topic of the influence of heuristic teaching of students on their readiness for self-development. The relevance of the topic is related to the fact that in modern conditions of increasing changes in the educational and professional spheres, self-learning and



self-development skills are in demand among all participants in these processes. Heuristic learning contributes to the formation of such skills. Students educated on the basis of heuristic approach demonstrate readiness to solve non-standard problems, ability to make independent decisions in complex professional and social circumstances.

Keywords: student's self-development, heuristic approach, assertiveness, individual educational trajectory, educational independence, creative development

Folklore as a valuable relic of folk pedagogy for the nation

I. O. Mamedova – Doctor Ph. D.

Annotatoin. The scientific article analyzes how ideas about the influence of fate on a person's life and the heredity factor are widespread in folk pedagogy. It would be correct to note the consideration of the environmental factor in the formation of personality, and what character the educational factor bears in folk pedagogy. The scientific article examines general ideas about the methods and means of folk education. The unity of methods and forms in folk education and their mutual application is noted. National customs and traditions are listed in unity with religious values as one of the means of folk education.

Keywords: ideology, folk pedagogy, folk education, nation, national values, traditions and customs

Social education as a pedagogical phenomenon: a theoretical aspect

Z. S. Dzhanhuvatova – k. soc. sciences, associate professor

S. M. Dzhanhuvatov

Annotation. The article examines the features of the formation of value orientations of modern youth (theoretical aspect) and substantiates the role of education and upbringing in the process of forming the correct consciousness of the younger generation as the main element of culture.

Keywords: value orientations, education, upbringing, personality development, competence approach, educational process

Analysis of the approaches of scientists and teachers to the process of forming a culture of life safety among students

A. V. Zel – University College of the Federal State Educational Institution of Higher Education "I. Kant BFU", Kaliningrad, Russia

A. V. Kolomeets – FGKVOU VO "BVVMU named after Adm. F. F. Ushakov", Kaliningrad, Russia

Annotation. In Russia, special attention is paid to the formation of a culture of safety of the population, because ensuring the safety of citizens, their healthy lifestyle, compliance with norms and rules of safe behavior, preservation of life and health, is one of the priority components of a high standard of living for citizens. It is the formation of a culture of life safety that is determined by the main target of the activities of organizations engaged in educational activities. The research methodology is the analysis of scientific and educational literature on the problem of the formation of a safety culture, as well as the definition of the scientific apparatus and the selection of research methods. Research results: the approaches of various scientists to the process of forming a culture of life safety are analyzed. The main tasks of forming a culture of safety of life of students, as well as the value orientations of the formation of this culture, are considered.

Keywords: life safety, safety culture, life safety culture, students

The potential of organizing additional professional education courses for personnel training in the field of furniture production

A. G. Kopiy¹, E. A. Malgina² –

^{1,2}Nizhny novgorod State Pedagogical University named after K. Minin, Nizhny novgorod, Russia ¹copiiag@mininuniver.ru

Annotation. The article discusses the organization of additional professional education courses for personnel training in the field of furniture manufacturing. The analysis of modern training formats, successful initiatives and partnership opportunities with industry is carried out. The results of the study provide recommendations for organizations to create effective training programs that take into account market needs and promote professional development of employees. The article highlights the importance of adapting educational programs to new technologies and industry challenges.

Keywords: additional professional education, personnel training, furniture design, furniture manufacturing, design

On the issue of formation of cognitive independence of students of technical university

E. V. Kochanovskaya – Kaliningrad State Technical University, Kaliningrad, Russia

Annotation. The competence of cognitive independence implies the formation of cognitive skills of students' independent work, which allows students to effectively organise the learning process and decide their own educational trajectory, to solve educational and self-educational problems, to link and use separate parts of knowledge, to benefit from educational experience, to take responsibility for the education received.

Keywords: independent work, cognitive independence, educational process

Education of patriotism in technical university students: problems, experience, prospects

Zh. V. Rembolovich – Candidate of Pedagogical Sciences, Associate Professor, Baltic State Academy of the Fishing Fleet, Kaliningrad State Technical University

N. V. Yurasyuk – Candidate of Pedagogical Sciences, Associate Professor, Baltic State Academy of the Fishing Fleet, Kaliningrad State Technical University

Annotation. The main problems that cause difficulties in the civic and patriotic education of students of a technical university are considered, ways to solve these problems are described using the example of the experience of KSTU in instilling patriotism among students, and the prospects for the activities of a technical university in instilling patriotism are determined.

Keywords: educational work, patriotism, civic engagement, technical university students ndependence, educational process

On the Issue of the Formation of Communicative Literacy among Cadets in the Framework of Studying the Discipline "Russian Language and Culture of Speech"

T. V. Nikitina – Doctor of Pedagogical Sciences, Associate Professor

Annotation. In the article, the author examines the existing definitions of the concept of "communicative literacy", offers his own, identifies the component and levels of formation of communicative literacy and gives examples of forms and methods that contribute to its formation. The author examines the step-by-step process of formation of communicative literacy among cadets of the Perm Institute of the Perm Institute of the Federal Penitentiary Service of Russia.

Keywords: communicative literacy, formation of communicative literacy, cadets, departmental university

²e.a.sletova@gmail.com



"Bloom's daisy" technique for teaching professional reading skills

V. V. Abyshkina – Senior Lecturer of the Department of Russian Language and Linguoculturology of Russian Language Institute of the Peoples' Friendship University of Russia

Yu. A. Merculova – Senior Lecturer of the Russian Language Department № 4 of Russian Language Institute of the Peoples' Friendship University of Russia, PhD in Philological Science

O. A. Sveshnikova – Associate Professor of the Russian Language Department № 4 of Russian Language Institute of the Peoples' Friendship University of Russia, PhD in Philological Science

Abstract. The article discusses the Bloom's Daisy technique as applied to teaching professional reading skills to students of natural science and technical specialties. This method is still relevant due to its simplicity and accessibility for practicing teachers. It has been proven that the use of recommendations for compiling questions related to various levels of thinking ensures a more successful formation of students' thinking skills. As a practical implementation of this method, examples are given from an educational and methodological manual that was developed for students of the Engineering Academy, the Faculty of Mathematical and Natural Sciences, and the Institute of Ecology of the Patrice Lumumba Peoples' Friendship University of Russia (level B1+).

Keywords: Russian as a Foreign Language, Bloom's Daisy, teaching professional reading, TORFL, 1st Certification Level, 2nd Certification Level

Experience of using the characteristics of binding polymers in the training process of future restorers

O. V. Astraukh – Candidate of technical sciences, associate professor of the department. Chemistry Institute of Agroengineering and Food Systems Federal State Budgetary Educational Institution of Higher Education "Kaliningrad State Technical University", Kaliningrad, Russia T. V. Karmanovskaya – Ph.D., senior lecturer, SPbGTI (TU) St. Petersburg State Technological Institute (Technical University) St. Petersburg, Russia

Annotation. Pedagogical experience in the process of training future restorers in the context of reconstruction of architectural heritage becomes a relevant task of artistic and aesthetic design of architectural space, filling the environment with objects of various kinds of painting. In contemporary art it is necessary to rely on the experience of applying a variety of techniques and technologies, enriching the spatial environment with decorative elements. Stability and durability of works of monumental and easel painting depend on the composition and quality of the materials used. To identify the composition of polymers it is necessary to compare a number of physical and chemical characteristics and analyze the changes occurring in the process of aging of materials under the influence of the environment.

Keywords: teaching experience, fresco painting, oil painting, tempera painting, colorful layer, texture, polymer aging, IR spectroscopic studies, adhesive stabilizer

Using the pedagogical potential of art in the self-realization of youth

O. I. Vaganova¹, A. A. Akhlynova² –

^{1,2}Minin Nizhny Novgorod State Pedagogical University, Nizhny Novgorod, Russia **E. A. Aleshugina**³ – Nizhny Novgorod State University of Architecture and Civil Engineering, Nizhny Novgorod, Russia

Annotation. Alt is determined that art-pedagogical technologies that integrate art into the educational process play an important role in conditions when modern society requires high social competence and readiness for constant self-realization from young people. The definitions of creativity and self-realization are given. The article considers the importance of interactive art-pedagogical technologies in the context of creating a comfortable space for self-realization, active interaction and joint creativity of students, the development of their critical, creative thinking and creative skills. The main methods within the framework of this technology are given; the difficulties that may arise in the process are considered. The article analyzes the results of a study conducted to identify the impact of interactive art

and pedagogical technologies on the development of creativity and motivation for self-realization of young people. Conclusions are drawn about the need to ensure comfortable conditions for modern youth during their implementation.

Keywords: interactive art-pedagogical technologies, art, creativity, self-realization

Practical training of future teachers to work with parents

- **A. S. Karpechenko** Candidate of Pedagogical Sciences, Associate Professor of the Department of Theory and Methods of Preschool, Primary and Special Education of the Institute of Pedagogy of the Federal State Budgetary Educational Institution of Higher Education "Kaluga State University. K. E. Tsiolkovsky"
- **O. A. Nechaeva** Candidate of Pedagogical Sciences, Associate Professor of the Department of Pedagogy of the Institute of Pedagogy of the Federal State Budgetary Educational Institution of Higher Education "Kaluga State University. K. E. Tsiolkovsky
- **E. V. Korzhueva** Candidate of Pedagogical Sciences, Head of the Department of Pedagogy of the Federal State Budgetary Educational Institution of Higher Professional Education "Kaluga State University named after K. E. Tsiolkovsky"

Annotation. The issues of interaction between a teacher and parents in an educational organization are considered. The author's approach to the organization and content of the pedagogical block of tasks for the practical training of future teachers at K.E. Tsiolkovsky KSU, contributing to building interaction with the family in future professional activities, is described.

Keywords: family, teacher, practical training, educational organization, practice

Diagnosis of the level of development of students' respect for animals during the development of the animalistic genre

O. A. Ovsyannikova¹, Yu. A. Kulik –

^{1,2}Tyumen State University, Tyumen, Russia

Annotation. The article is devoted to the development of diagnostic tools for studying the level of development of caring attitude towards animals in the course of mastering the animalistic genre, conducting initial diagnostics of the studied quality of schoolchildren and its analysis. Manifestation of indifference and cruelty towards animals is very common among schoolchildren and even adults, so the problem is extremely relevant. In modern society, one can increasingly encounter a low level of environmental, aesthetic culture, due to the promotion of pragmatic "values" and the lack of value of spiritual qualities and morality. There is also a lack of empathy and compassion, which results in an irresponsible attitude towards animals. The ecological and aesthetic approach in education can be implemented in fine art lessons, so the problem of developing a caring attitude towards animals in the course of mastering the animalistic genre can be solved by involving the emotional and imaginative sphere of students, for this it is necessary to develop diagnostic tools for studying the desired quality of schoolchildren.

Keywords: caring for animals, animalistic genre, diagnostics

Professiongraphic monitoring as a tool for assessing the formation of the motivational component of cadets' professional competence

K. A. Novoselov – Senior lecturer, Baltic Fishing Fleet State Academy of Kaliningrad State Technical University

Annotation. The transformation of the higher education system, including digitalization, requires a new look at already known concepts and their rethinking. Concepts such as "motivation", "motive", "educational motivation" and "professional motivation" that arose in the XIX century and developed in the XX and XXI centuries in each epoch require new approaches to their study, especially in conditions of widespread distance and blended learning. The purpose of our work was the occupational monitoring of the motivational component of the professional competence of cadets of a maritime university in a blended training format, the article reveals the results of our research.

Keywords: professionographic monitoring, blended learning, higher education, digitalization, maritime university, educational motivation, professional motivation, cadets



Organisation of the process of teaching Russian to foreign students: problems and prospects

O. N. Soluyanova – andidate of pedagogical sciences, assistant professor of the department of Foreign Languages and Professional Communication, acting head of the Russian as a foreign language department, National Research Moscow State University of Civil Engineering, Moscow

Annotation. The aim of the research is to find ways to optimise the process of teaching Russian to foreign students by identifying the most acute problems, analysing them and proposing solutions. As a result of this work, the most urgent problems that most teachers face on a regular basis are clustered into three groups: administrative, organisational and communicative (teachers' interaction among themselves and with students). Each of the problems is studied and described in terms of the reasons for its occurrence and possible solutions. The conclusion expresses the opinion that in order to optimise the teaching of Russian to foreign students it is important to take into account all aspects of the educational process and to build a single transparent system of interaction between all its participants, both in general didactic and interpersonal terms.

Keywords: international students, teaching process, Russian as a foreign language, interaction

Role of Associative-Visual Maps in Interior Design

E. A. Suppes – Tyumen Industrial University, Tyumen, Russia M. N. Zyurkalova – Tyumen Industrial University, Tyumen, Russia

Annotation. This article examines one of the initial stages of interior design, where the architect-designer interacts with the customer and colleagues within the project team using associative-visual maps. There are different types of associative-visual maps, each of which helps to effectively determine the vector of project development at different stages of approval and reduce deadlines at the stage of pre-project analysis.

Keywords: visual series, collage, concept collage, interior design, sketches, pre-project analysis, design

Evaluation tools for assessment in foreign languages teaching at non-linguistic faculties of the university

- **S. E. Tsvetkova** PhD in education, associate professor of the department of "Theory and Practice of Foreign Languages and Linguodidactics", Kozma Minin Nizhny novgorod State Pedagogical University, Nizhny novgorod, Russia
- **D. K. Voronina** PhD in education, lecturer of the department of "Theory and Practice of Foreign Languages and Linguodidactics", Kozma Minin Nizhny novgorod State Pedagogical University, Nizhny novgorod, Russia
- **E. A. Terekhova** Senior lecturer of the Department of Foreign Languages, Nizhny Novgorod State Technical University named after R. E. Alekseev, Nizhny novgorod, Russia

Annotation. The article analyses the system of evaluation tools by means of which the assessment of foreign language competencies development among university students is implemented. The relationship between basic concepts: generally accepted in methodology, universal names of evaluation tools and special characteristics of assessment used in the field of language education at non-linguistic high school faculties is considered.

Keywords: foreign language training, foreign language competencies, forms, types and methods of assessment, objects of assessment technology, evaluation tools

Technology of an integrated approach to teaching drawing in the first year of universities in creative fields

K. O. Shokhov¹, N. V. Bagapova² –

¹Tyumen State University, Tyumen, Russia

Annotation. The article considers the problems of teaching drawing in the first year of creative universities. It was decided to consider the problems through the prism of the presence or lack of motivation of students, and also offers relevant approaches to solving this problem; the issue of an integrated approach to teaching drawing, contributing to increasing motivation and improving the quality of graphic works of first-year students.

Keywords: teaching drawing, creative directions, motivation of first-year students, interactive teaching methods, master classes in drawing, practical significance, individual approach

Digital environment "Minecraf" as a way of developing symbolic actions of students in extracurricular activities

E. E. Alexeeva, G. I. Nazarov – Immanuel Kant Baltic Federal University, Kaliningrad, Russia

Annotation. This article examines the use of the digital environment "Minecraft" as a tool for developing symbolic actions in 10th grade students in teaching mathematics. The analysis of the functional capabilities of "Minecraft" proposed mechanisms for introducing the gaming process into the educational path. Practical tasks aimed at developing sign-symbolic skills, as well as modeling algebraic equations with the construction of geometric figures, are derived. The pros and cons of using the digital environment "Minecraf" in education are discussed, as in the successful implementation of this methodology. Conclusions are made about the capabilities of the digital environment "Minecraft" as a potential tool for improving sign-symbolic actions in high school students.

Keywords: "Minecraft", sign-symbolic actions, mathematical education, digital environment, gaming technologies

Pedagogical technologies and digital tools

M. N. Bulaeva – Candidate of Pedagogical Sciences, Associate Professor

O. N. Filatova – Candidate of Pedagogical Sciences, Associate Professor

M. P. Prokhorova – Candidate of Pedagogical Sciences, Associate Professor

Nizhny Novgorod State Pedagogical University named after Kozma Minin, Russia

Annotation. Modern pedagogical technologies include various approaches that actively use digital tools to improve the effectiveness of learning. These solutions not only make the learning process more interactive and exciting, but also contribute to the development of students' necessary digital society competencies, such as critical thinking, creativity, and the ability to self-study and self-development. In this article, we will consider the possibilities of introducing digital tools into pedagogical technologies.

Keywords: pedagogical technologies, educational process, digital tools, digital technologies, professional education

An integrated approach to teaching machine learning and deep learning: methods and practical tools

D. V. Vlasov – The Herzen State Pedagogical University of Russia

Annotation. Training in modern information technologies is impossible to imagine without mastering machine learning and deep learning approaches widely used for analyzing and processing big data. These approaches are actively used to solve such problems as regression, prediction, classification and clustering, which are of high importance for engineering educational programs. The article discusses the structure of the courses "Foundations of Machine Learning" and "Mathematical Foundations of Deep Learning", including key algorithms, techniques and practical tools that contribute to the development of students' competencies in data analysis and artificial intelligence model building.

²Tyumen Industrial University, Tyumen, Russia



Keywords: machine learning, deep learning, educational analytics, predictive analytics in education, digital technologies, educational data, neural networks, predictive analytics, learning process optimization, student competencies

Possibilities of applying artificial intelligence in the educational process

A. V. Gushchin – Candidate of Pedagogical Sciences, Associate Professor¹

M. I. Koldina – Candidate of Pedagogical Sciences, Associate Professor²

Yu. M. Borschevskaya – Candidate of Pedagogical Sciences, Associate Professor³

¹Nizhny novgorod State Conservatory named after M. I. Glinka, Russia

²Nizhny novgorod State Pedagogical University named after Kozma Minin, Russia

³Nizhny Novgorod State University named after N. I. Lobachevsky, Russia

Annotation. The use of artificial intelligence technologies in education opens up new opportunities for analyzing and assessing various factors that affect learning. Assessing factors such as fatigue and engagement can not only improve academic performance, but also create more comfortable learning conditions. Artificial intelligence opens up opportunities for individualizing learning, improving the quality of educational material, and improving student performance.

Keywords: professional education, artificial intelligence, educational effectiveness

Chat-bot as a means of organizing psychological help for adolescents in the Republic of Karelia

O. Yu. Yudina – Senior lecturer at the Department of Psychology, PetrSU

E. A. Safronova – lecturer of the Department of Psychology, PetrSU

V. V. Kruglova – student

A. E. Semenova – student

A. A. Abramkova – student

A. A. Belova – student

Annotation. The results of the study on the role of chatbots in the organization of psychological support for adolescents in the Republic of Karelia are presented. The data indicate a high degree of youth involvement in the digital environment, which opens new opportunities for psychological support through anonymous and accessible platforms. According to the survey results, adolescents show a need to receive help through chatbots, but prefer communication with live psychologists in most cases. The study highlights key topics that teens are interested in, such as self-determination, learning, and emotional distress. The identified needs became the basis for the creation of the chatbot "Psychological Compass", which offers a wide range of psychological support, information and educational materials.

Keywords: digital technologies, messengers, psychological help, adolescents, chatbots

The relationship between cognitive style and attention in adolescents

N. V. Lebedeva – Dr. ped. Sciences, Associate Professor, Russian University of Econmics named after G. V. Plekhanov, Moscow, Russia

Annotation. The urgency of the problem presented in this article is due to the rapid development of digitalization, technlogization, and ever-increasing requirements for obtaining and processing information. The organization of learning activities and their results are largely determined by an understanding of cognitive styles. The purpose of this study is a theoretical and methodological analysis of the concept of cognitive styles and the definition of the relationship between cognitive style and attention in adolescents. The identification of cognitive styles of use-dependence and nn-dependence made it possible to determine their relationship with attention in adolescents. The results obtained are of practical importance for organizing educational activities and determining the trajectories of cognitive processes in adolescents.

Keywords: cognitive style, information processing, utility dependence-field dependence, attention, teenagers

Injury Prevention in Physical Education Classes: Experience of Baltic Fishing Fleet State Academy of Kaliningrad State Technical University

M. M. Averyanova – senior lecturer

O. A. Klimenko – senior lecturer

Annotation. The article examines the specifics of injury prevention in physical education classes at the academy. The article provides statistics on sports injuries during physical education classes. The article analyzes the causes of injuries and accidents during physical education classes, and provides recommendations for their minimization, covering the organizational and methodological aspects of physical education. The article identifies key principles of injury prevention in physical education classes at the academy.

Keywords: physical education, physical exercises, injury, academy, students

Features of maternal upbringing of older preschool children in families with participants in a special military operation

A. V. Babadzhanova-Pavlova – Candidate of psychological sciences, associate professor

E. A. Torpakova – Candidate of philological sciences, associate professor

Annotation. The article analyzes domestic and foreign studies on the education of older preschoolers in families where fathers perform difficult and dangerous tasks as part of a military operation. The psychological problems of preparing for changes in the type of relationship between parents and older preschool children in families where the lives of both spouses are being reorganized are being raised. The article describes the results of an empirical study of the psychological and pedagogical aspects of life and the conditions of parenting children without a father who is in a war zone. The practical application of the results of this study makes it possible to adjust the support system for their family members participating in a special military operation. This article is intended as a recommendation.

Keywords: maternal upbringing, special military operation; participants in a special military operation; families of participants in a special military operation, parenting style, hyperprotection, condoning hyperprotection, phobia of child loss, expansion of parental feelings

Dynamics of students' professional identity

O. V. Strelkova – Candidate of psychological sciences, Associate Professor, Baltic State Academy of Fishing Fleet, Kaliningrad

A. V. Erygina – Candidate of Economic Sciences, Associate Professor, Federal State Budgetary Educational Institution of Higher Education "Saint-Petersburg State Institute of Technology (Technical University)", St. Petersburg, Russia

N. A. Bovykina – Candidate of Economic Sciences, Associate Professor, St. Petersburg University of Management and Economics Technologies, St. Petersburg, Russia

Annotation. The article presents the results of the analysis of the dynamics of the status and structure of professional identity of students studying in the field of psychology. The stage of training at which signs of a professional crisis are observed is identified.

Keywords: professional identity, identity formation, identity maturity, emotions



On the problem of actualization of methodological issues in the study of chemistry at the university: metatheoretical as

V. S. Gnatyuk – Doctor of Philosophy, Associate Professor, Associate Professor of the Department of Higher Mathematics and Physics, Murmansk Arctic University (UIA)

N. N. Morozov – Doctor of Technical Sciences, Professor, Professor of the Department of Informatics and Computer Engineering of the Academy of Civil Protection of the Ministry of Emergency Situations of Russia (AGZ)

O. M. Sorokin – Ph.D. of Pedagogic Sciences, Associate Professor of the Department of Higher Mathematics and Physics, Murmansk Arctic University (UIA)

Annotation. The problem of methodological issues in the study of chemistry at the university is actualized; the methodological and didactic aspects of teaching are considered. The objectives of the research are: the genesis of chemical knowledge in the unity of historical and logical methods in the aspect of the development of its conceptual systems, because the formation of the scientific methodology of this knwledge is impossible without its historical reconstruction; the development of didactic methods that determine the strengthening of methodological component in the formation of the necessary competencies in the process of teaching chemistry. All problems are considered in the metatheoretical aspect associated with the formation of a chemical picture of the world. It is emphasized that without solving these issues, it is impossible to further develop not only chemistry, but also science as a whole.

Keywords: chemistry, chemical picture of the world, methodology, teaching methods, didactics, metatheoretical

Features of teaching foreign student's physics: author's experience

S. S. Kutsenko – senior lecturer of the department of Physics of the FGBOU VO "KGTU"

Annotation. The article deals with the problems of teaching foreign students at a technical university. The author's experience of teaching physics to foreign students is provided.

Keywords. International students, teaching physics, problems of methodological support

Technologies of socialization of cadets of the first year of study in the process of extracurricular activities

M. N. Gladkova¹, G. I. Zinnatullina², M. S. Minvaeva³, N. S. Streltsova⁴ –

^{1,2,3,4}Federal state military educational institution of higher professional education Tyumen higher military engineering command school name of the marshal of engineer troops A. I. Proshlyakov, Tyumen, Russia

Annotation. Socialization is considered as a process that takes place throughout the life of a person, and involves the accumulation of skills, certain abilities necessary for successful functioning in society. The article presents an analysis of specially organized conditions, which, as a rule, are carried out within the framework of educational activities and have a direct impact on the process of socialization of first-year cadets. It is emphasized that a conscious choice of a future professional direction becomes a condition for the most effective socialization process. It has been revealed that admission to a military university is accompanied by a complex process of adaptation to new living conditions, therefore it is advisable to provide organizational and pedagogical conditions that will positively affect the socialization of cadets. It has been established that the positive socialization of cadets is carried out in the process of increasing life stability by strengthening the motivational component.

Keywords: officers, joint activities, creativity, personal development, motivation

Scientific and methodological support of the discipline "Fire training" as a factor in increasing the effectiveness of training future officers

A. V. Zhemchuzhnikov – Associate Professor

Annotation. The presented article examines the role of research activities in the officer training system in the conditions of modern military education. Particular attention is paid to the integration of research projects into the discipline "Fire training", which contributes to the development of cadets' cognitive, analytical and practical skills necessary for solving non-standard problems in military service. Examples of research projects are described, such as experimental studies of the armor protection of armored combat vehicles and personal armor, in which cadets actively participate. The importance and significance of research work for the formation of professionally significant competencies in cadets, such as independence, initiative and critical thinking, is considered. The prospects for further development of the research component in military education to improve the quality of training of officers who are ready to solve complex and non-standard tasks in a changing military situation are detailed.

Keywords: cadet, fire training, applied scientific research, scientific and methodological support of fire training

Professional self-education of cadets of higher military educational institutions

A. A. Lebedeva¹, M. A. Danilchenko², E. I. Dvornikova³, Y. B. Luneva⁴

^{1,2,3,4}Federal state military educational institution of higher professional education Tyumen higher military engineering command school name of the marshal of engineer troops A. I. Proshlyakov, Tyumen, Russia

Annotation. The article highlights the specific features of military education that influence the formation of such personality qualities as responsibility, the ability to allocate time competently. The definitions of the concepts of "self-education" and "professional self-education" are considered; it is determined that self-education is one of the ways to form a willingness to perform professional duties and strive for continuous improvement of their skills. Based on the analysis of various sources, the tasks of professional self-education, the stages of its implementation and techniques are presented, among which cadets can choose the most effective in terms of their individual characteristics. The article analyzes the results of a study conducted among teachers in order to identify the most important conditions conducive to the professional self-education of cadets of military educational institutions. The conclusion is made about the importance of professional self-education of cadets for their future activities.

Keywords: self-improvement, military university, self-control, value system, initiative

Assessment tools for cadets in laboratory chemistry classes at the military institute

L. V. Pustovik¹, I. A. Sarana² —

^{1,2}The Perm Military Institute of the National Guard's Forces of the Russian Federation, Perm, Russia

Annotation. The system of monitoring and evaluating the activities of cadets in laboratory chemistry classes within the framework of the pedagogical technology "Learning in collaboration" (group method) is discussed. There are five stages in the structure of classes: the theoretical part, the entrance control, the experimental part, the preparation of the laboratory work report, and the acceptance of reports. Criteria for evaluating the cadets' performance at each stage of the lesson are presented; an integrated approach to evaluating the practical part of the lesson is considered, including learning activities during the experiment, preparation and protection of the experiment report, on the basis of which the final assessment for the experimental part of the lesson is given.

Keywords: analytical chemistry; quantitative analysis; laboratory work; entrance control; test; group method; collaborative learning; experiment; assessment systems; cadets



The role and place of personal potential in the professional development of departmental universities of the Federal Penitentiary Service of Russia cadets

D. A. Khorolsky – Perm Institute of the Federal Penitentiary Service of Russia, Perm, Russia, Lecturer

Annotation. The author actualizes the problem of realizing personal potential in the professional activities of employees of the penal enforcement system, the development of this integral quality among cadets of departmental universities of the Federal Penitentiary Service. The article focuses on the need to clarify the professionally important qualities of employees, their correlation with the components of personal potential for the organization of support for the process of education and training of cadets, contributing to the stimulation of personal potential.

Keywords. Personal potential, cadets of departmental universities of the Federal Penitentiary Service, employees of the penal enforcement system, professionally important qualities, development of the personal potential of cadets

Methods of formation of military-political consciousness of cadets

O. G. Shagalova¹, I. L. Lyapin², A. V. Gladkov³, V. I. Brusnitsyn⁴ –

^{1,2,3,4}Federal state military educational institution of higher professional education Tyumen higher military engineering command school name of the marshal of engineer troops A. I. Proshlyakov, Tyumen, Russia

Annotation. The modern conditions that have a direct impact on the development of the Armed Forces of the Russian Federation are analyzed. An assessment of the situation of cadets who are at the beginning of their combat training has been carried out from a psychological point of view. The concept of military-political consciousness and the features of its formation are analyzed; it is revealed that the organization of military-political work provides ample opportunities for purposeful and systematic activities to form a sense of public and military duty, the ability to show their professional skills in practice. The positive and negative elements of military-political consciousness and its dangerous areas are considered. The methods of forming the military-political consciousness of cadets of military educational institutions in the course of academic and extracurricular activities, as well as in the framework of solemn events, are presented. The article analyzes the results of a study conducted among the teaching staff in order to determine the pedagogical conditions conducive to the formation of military and political consciousness of future officers.

Keywords: legality, political consciousness, military duty, critical thinking, interaction

The System of Exercises Directed to Expanding Vocabulary to Read Specialized Texts at the Departmental Institutes of the Federal Penal Service of Russia

N. A. Shvetsova – Candidate of Philosophical Sciences, senior lecturer at the Department of Humanitarian and Socio-Economic Disciplines of the Perm Institute of the Federal Penal Service of Russia

Annotation. A system of exercises is proposed aimed at forming and expanding the active and potential vocabulary of cadets for reading texts in their specialty when teaching a foreign language at departmental universities of the Federal Penitentiary Service of Russia. The provisions on this issue described in the scientific literature are analyzed. A set of lexical exercises and associograms is proposed, thanks to which professional terminology is included in the active vocabulary of students. As an example of the formation of an active vocabulary among cadets, work with texts for studying the penitentiary system in Russia and foreign countries is given.

Keywords: professionally oriented foreign language teaching, system of exercises, texts in the specialty, professional terms, associograms, vocabulary

Communicative culture of foreign medical student: axiological and scenario approaches

K. S. Bezrukova – Postgraduate student of Department of Russian Language and Methods of its Teaching of Philological Faculty, Peoples' Friendship University of Russia named after Patrice Lumumba (Moscow, Russian Federation).

Associate professor Department of the Russian Language no 5 of the Institute of the Russian Language, Peoples' Friendship University of Russia named after Patrice Lumumba Moscow, Russian Federation

Annotation. The article discusses the use of axiological and scenario approaches in teaching foreign medical students the Russian language. The presented system of exercises promotes the development of logical-informational and speech communication skills, as a result of which speech correction of the patient's psycho-emotional state is carried out.

Keywords: Russian as a foreign language, communicative culture, medical discourse, linguistics orientation, axiological approach, scenario approach, speech strategies and tactics, foreign medical students

Personal determinants of prosocial behavior and features of its formation in high school students

A. V. Faevskiy – Postgraduate student, Higher School of Education and Psychology, Immanuel Kant Baltic Federal University, Kaliningrad, Russia

Annotation. The article presents personal determinants of prosocial behavior as characteristics of socially useful activity of the individual, as well as the features of its formation in high school students. The analysis of the existing views of scientists and specialists on various aspects of prosocial behavior of the individual, the specifics of its prosocial activity in high school students is presented, the need to introduce work on the development of prosocial behavior in high school students into the educational process of the school is substantiated. It is emphasized that the prosociality of the behavior of high school students is formed in the process of targeted influence in the course of education and upbringing of the individual, characterizing the system of formation of the worldview, moral principles and values of the individual, as well as the importance of developing prosocial activity of high school students by informing about the possibilities of manifestation of prosocial behavior, coverage in the media, formation of spiritual and moral value guidelines and attitudes towards socially significant activities.

Keywords: prosocial behavior, prosocial activity, high school students, educational process