

CONTENTS

PHILOLOGY

- Kormilov S.I.* Cities in N. Gumilev's poetry.
- Kotova E.L.* A Series of Articles on Pushkin Written in the 1930s by A.V. Makedonov: the Problem of Humanism.
- Merkin B.G.* Plot Peculiarities of L.N. Tolstoy's Short Stories for Children.
- Korolyova I.A.* The Roads of War in the Lyric Poetry of A.T. Tvardovsky through the Prism of Proper Names.
- Demidova E.N.* The Problem of Terms Paronymy in Legal Texts (on the Data of Laws and Regulations).
- Kordi E.E.* Taxis Relations in Phrases with Participial and Gerundial Constructions in French.
- Glushak T.S., Talstaya A.A.* The Problem Aspects of Possession (on the Data of the Russian and German Language Material).
- Gurevich R.W.* Basic Tendencies of the Development in the Hermann Kant's Work.
- Njubina L.M.* Text as a Culturegenetic Phenomenon.
- Belyutina Yu.A.* Humor as a Means for Pragmatic and Social Manipulation.
- Lavrukhina E.I.* The Two-level Model of the Cognitive Process in the English Language.

HISTORY

- Kutarev O.Y.* Fritz Gess's Memoirs as Valuable Historical Source.
- Kozlov O.V.* To the Issue of the Formation of Secondary Education in Smolensk Province in the Second Half of the Nineteenth Century.
- Kobets O.V.* Planned dekulakuzation in the Western Oblast in the Spring of 1931.

PHILOSOPHY, SOCIOLOGY AND CULTURAL STUDIES

- Silnitsky G.G.* The Dialectics of «Fate» and «Necessity» in the Genesis of Pre-Socratic Old Greek Philosophy.

BIOLOGY AND NATURAL SCIENCES

- Beryozkina G.V.* Functional Morphology of Female Part of Reproductive System of *Lymnaea stagnalis* (Linnaeus, 1758) (Gastropoda Pulmonata Lymnaeidae).
- Gildenkova M.Yu.* New Species of the Genus *Carpelimus* Leach, 1819 for Palaeartic Region and Oriental Region (Coleoptera, Staphylinidae, Oxytelinae).
- Gorodnichenko E.A., Korotkova G.V.* Young Girls and Boys Cardiovascular System Adaptive Reactions Peculiarities during Physical Activity according to the Type of Blood Circulation.
- Rybkin S.V., Belyakov M.V.* Methodology of Determination of the Sensitivity Spectra of Wood Plants Seeds.
- Kochurko V.I., Abarova E.E.* Soybean Yield Depending on Nitric Nutrition Conditions.
- Evdokimov S.P.* The Spatiotemporal Zoning in Pleistocene Paleogeography.
- Makarova M.A.* Large-Scale Vegetation Mapping and Applied Aspects of Vegetation Maps Usage (NW Ladoga region, St. Petersburg University Field Station).
- Malkhazova S.M., Vatlina T.V.* The Influence of Drinking Water Quality on Population Health in Smolensk region.
- Pototskaya T.I.* Territorial Organization of Diamond Jewelry Auction Trade.
- Chasovsky V.I.* Cluster Approach in the Modernization and Development of Industry of the Commonwealth of Independent States.

MATHEMATICS AND TECHNOLOGICAL SCIENCES

- Bolotin I.B., Klimenko D.A.* On the Solution of the First Basic Hilbert Boundary Value Problem with Discontinuous Coefficients for Bianaalytic Functions for the Upper Half-plane.
- Evdokimova G.S.* The Factors that Reduce Efficiency of the Queuing Systems.
- Emelchenkov E.P.* Geometry over algebras of type $\langle 3 \rangle$. Incidence structure with parallelism.
- Kiryatsky E.G.* On a functional on the class typically-real functions.
- Rasulov K.M., Komissarova A.N.* On the Solution of the Boundary Value Problem of Neymann Type in Classe of Quasiharmonic Functions of the Fourth Genus.
- Lebedeva M.Yu.* Using the Method of Brown for Sales Forecasting in Marketing.
- Pavlova L.V., Romanova I.V., Samoilova T.A.* The Solution of Philological Problems by Means of a Software Complex «Hypertext Search for Companion-Words in Author's Texts».
- Pakhomov E.I.* Phenomenological Model of Rehbinder's Effect in Liquid Metal Environments.

PSYCHOLOGY AND PEDAGOGY

- Senchenkov N.P.* Pedological Study of Urban Placed Children in 1920-s.
- Glebova G.F.* Designing of Teaching using Individual Curricula in Secondary Schools.
- Chernykh A.V.* An Essay about a Picture as Means of Introduction of the World of Art Values to School Students, Learning at Home.
- Shabelnik V.V.* Formation of the Model of the Educational Environment of Higher Education Institution.
- Mironova A.I.* Specificity of Diagnostic Research of Seven Year Old Children Intellectual Development in the Process of Problem-Oriented Support.
- Sorochinskiy P.V.* Influence of Educational Virtual Reality in the Sphere of Biology on Thinking and Psychic State of School Students.
- Surkova E.G.* Features of the Individuality of Persons of Senior Mature Age, Realizing Themselves in Scientific Work.

SCIENTIFIC EVENTS

CONFERENCES

- Koroleva I.A.* Onomastics in Smolensk: Problems and Perspectives of Research. The Third Interuniversity Scientific-Practical Conference (Smolensk, Smolensk State University, March 15, 2013).
- Makarova I.J., Chmeleva E.V.* Panel Discussion «Organization of Support of Children with Diseases of Autism Spectrum» (Smolensk, Smolensk State University, April 2, 2013).

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OUR AUTHORS

SYNOPSIS OF THE JOURNAL

PHILOLOGY

S.I. Kormilov **Cities in N. Gumilev's poetry**

Key words: *cities; Rome; Saint Petersburg; Europe; Africa; Asia.*

N. Gumilyov, who was known as a passionate traveler, mentioned in poems only six Russian cities and eighty-three foreign cities. Among them three cities were American, thirty-five were European, forty-five were African and Asian cities. In Europe he picked out the well-known, even the famous cities (especially Italian), in Africa such kind of cities which were unknown to most of Europeans. The poet wanted to show he was not a stranger in exotic countries either.

E.L. Kotova **A Series of Articles on Pushkin Written in the 1930s by A.V. Makedonov: the Problem of Humanism**

Key words: *Makedonov; Pushkin; Lotman; realism; humanism; typology of the characters.*

In Makedonov's articles on Pushkin in the 1930s much attention is paid to the problem of humanism and the typology of the characters. The observations and conclusions of the scientist have not lost their scientific value nowadays. It is confirmed, by the coincidence of several Makedonov's provisions with Y.M. Lotman's views on Pushkin and interest of modern researchers in this work.

B.G. Merkin **Plot Peculiarities of L.N. Tolstoy's Short Stories for Children**

Key words: *L.N. Tolstoy's works for children; peculiarities of the plot; «anecdotic explosion».*

The article analyses some peculiarities of the plots in L.N. Tolstoy's works for children. Special attention is paid to the fact that in his works for children Tolstoy uses uncharacteristic for his «adult» works device of «dynamic anecdotic explosion» that dramatizes the plots of his short stories for children.

I.A. Korolyova **The Roads of War in the Lyric Poetry of A.T. Tvardovsky through the Prism of Proper Names**

Key words: *A.T. Tvardovsky; lyric poetry of the war years; proper names (PN); anthroponym; toponym; names of the war heroes; the road to the West and the road home of the Soviet soldier and the system of proper names; the role of PN in a literary text.*

The present article is a continuation of a number of other works of the author about proper names (PN) in the creative activity of the great Russian poet A.T. Tvardovsky. The article considers in a detailed way anthroponyms and toponyms in his lyric poetry related to the war period. The article demonstrates how Tvardovsky reveals the key theme of that period, i.e. «the heroic way of the Soviet soldier to Victory» using special names of the characters and geographical objects. The role of proper names in a literary text is generalized.

E.N. Demidova
The Problem of Terms Paronymy in Legal Texts
(on the Data of Laws and Regulations)

Key words: *paronymy; term; legal text; legal act; dictionary.*

The paper analyzes the facts of undue paronymical replacement of terms in modern legal texts. Using specific examples of regulations, the author traces the causes and factors of the phenomenon and suggests ways to avoid them.

E.E. Kordi
Taxis Relations in Phrases
with Participial and Gerundial Constructions in French

Key words: *the French language; syntax; relative tense; participial and gerundial constructions.*

This paper examines temporal relations between verbal forms in phrases where the main action is expressed by a personal form of the verb and the accompanying action by a participial or gerundial construction. Gerundial constructions function as adverbial modifiers, while participial constructions may function as attributes or adverbial modifiers. The paper proposes an analysis of the taxis meanings of simultaneity and anteriority expressed by gerundial and participial forms.

T.S. Glushak, A.A. Talstaya
The Problem Aspects of Possession
(on the Data of the Russian and German Language Material)

Key words: *possession; ownership; possessor; alienable possession; unalienable possession; functional-semantic field of possession; prototype.*

This article deals with the category of possession and its limits. The functional-semantic field of possession is based on the opposition "alienable possession – unalienable possession", where both of them are further divided into several others. The field has got three sectors – concrete objects, interpersonal relations and abstract objects. Possessive structures can express various types of relationship.

R.W. Gurevich
Basic Tendencies of the Development in the Hermann Kant's Work

Key words: *associated mode of narration; inner speech; comical effect; humor; irony; sarcasm; tragicomedy.*

Kant's work is characterized by two constant values: connection with the author's biography and connection of his characters with the past and the present of the GDR and after unification with the Eastern part of Germany. Social intuition of the author and his sense of time led to evolution of his characters which reflected a change in social and individual development in this part of the country – from enthusiasm of the first postwar decades to stagnation of the middle of the 1980s. G. Kant's works, written after the unification of Germany, testify to the fact that he remained loyal to his social and artistic ideas. His novels are based on two sources: genuine political temperament of the author and his powerful word-building gift. His books keep arousing interest to himself on the part of his readers and critics as these books reflect important stages in the history of German people embodied in a convincing artistic form.

L.M. Njubina
Text as a Culturegenetic Phenomenon

Key words: *memoir discourse; literary autobiography; intertextuality; memory; retrospection; inter-genre and inter-discourse interaction; precedent phenomena.*

Memoir literature as a complex linguo-cognitive phenomenon is one of the means of culture memory preservation. Literary autobiography as one of the types of memoir literature possesses strong culturegenetic potential and tells the reader about the authors professional experience, famous figures in the sphere of culture and politics, important events. Intertextuality, which is revealed in inter-genre and inter-discourse interaction as well as in wide use of precedent phenomena, is an inherent characteristic of this type of text.

Yu.A. Belyutina
Humor as a Means for Pragmatic and Social Manipulation

Key words: *humor; persuasion; pragmatic manipulation; violation of social laws; ridicule; persuasion tactics.*

The article deals with language as an instrument for persuasion, the so-called means of power over the interlocutor. From the pragmatic point of view, the aim of persuasion is to change the addressee's intentions, his/her behavior, to downgrade him/her or to express disapproval, etc. Social side of linguistic manipulation involves an attempt to impel the recipient of persuasion to follow the social norms which are conventional for the speaker and his/her community, and in case of complete incomppliance with the rules of communication established in the group – expel from the 'we-circle'. Humor is one of effective strategies for social and pragmatic manipulation with a wide range of tactics; their choice depends on the speaker's intentions.

E.I. Lavrukhina
The Two-level Model of the Cognitive Process in the English Language

Key words: *cognitive nouns; cognogenetic level; sequential level; phases, stages, steps of cognitive process.*

The article is devoted to the description of a two-level model of the cognitive process determined by the hierarchic relations between «cognogenetic» and «sequential» aspects and serving as the basis for semantic classification of the cognitive nouns in the modern English language.

HISTORY

O.Y. Kutarev

Fritz Gess's Memoirs as Valuable Historical Source

Key words: *national socialism; Germany; England; Fritz Gess; Ribbentrop; memoirs.*

The article is devoted to the analysis of the memoirs left by Fritz Gess who represented the national socialist press in London in the second half of the 1930s. The author attracts the attention of the researchers to valuable historical sketches which were left by this witness and active participant of German foreign policy activity.

O.V. Kozlov

To the Issue of the Formation of Secondary Education in Smolensk Province in the Second Half of the Nineteenth Century

Key words: *gymnasia; gymnasium; vocational school; professional school; zemstvo; Smolensk province.*

The article is devoted to the process of creation and activity of secondary schools in Smolensk province in the second half of the nineteenth century and also the problem of interaction of the central and local governments in the field of education.

O.V. Kobets

Planned dekulakuzation in the Western Oblast in the Spring of 1931

Key words: *collectivization; dekulakuzation; Western Oblast; kulak's farm.*

The article deals with particularities of the second stage of dekulakuzation in the Western Oblast in the spring of 1931. The author pays much attention to the initial detailed planned character of the campaign and the striving of the local officials for the obligatory overfulfillment of the preplanned quotas for the eviction which became a tragedy for thousands of peasants.

PHILOSOPHY, SOCIOLOGY AND CULTURAL STUDIES

G.G. Silnitsky

The Dialectics of «Fate» and «Necessity» in the Genesis of Pre-Socratic Old Greek Philosophy

Key words: *fate; causal, deterministic, teleological, eschatological types of necessity.*

The role of two subtypes of mythological images of fate, «causal» and «teleological», in the genesis of the notion of necessity in pre-Socratic Old Greek philosophy is discussed.

BIOLOGY AND NATURAL SCIENCES

G.V. Beryozkina

Functional Morphology of Female Part of Reproductive System of *Lymnaea stagnalis* (Linnaeus, 1758) (Gastropoda Pulmonata Lymnaeidae)

Key words: *molluscs; Lymnaeidae; reproductive system; functional morphology.*

*The histology of different sites of a female part of reproductive system of *Lymnaea stagnalis* is described; photos of sections are presented. Features of different organs structure in connection with their participation in the formation of egg syncapsules are shown.*

M.Yu. Gildenkov

New Species of the Genus *Carpelimus* Leach, 1819 for Palaearctic Region and Oriental Region (Coleoptera, Staphylinidae, Oxytelinae)

Key words: *Coleoptera; Staphylinidae; Oxytelinae; Carpelimus; Palaearctic Region; China; Oriental zoogeographic Region; new species.*

*The article deals describes nine species new to science: *Carpelimus* (s. str.) *capillus* sp. n. from China and Vietnam; *C.* (s. str.) *schawalleri* sp. n. from China; *C.* (*Trogophloeus*) *burckhardti*, sp. n. from Thailand and Malaysia; *C.* (*T.*) *carbonigrus* sp. n. from China; *C.* (*T.*) *limbicus* sp. n. from Tadjikistan; *C.* (*T.*) *makranczyi*, sp. n. from Vietnam; *C.* (*T.*) *paripalitans*, sp. n. from China, Vietnam, Cambodia, Thailand, Malaysia and Indonesia; *C.* (*T.*) *prudeki*, sp. n. from Turkey; *C.* (*T.*) *schuelkei*, sp. n. from China.*

E.A. Gorodnichenko, G.V. Korotkova

Young Girls and Boys Cardiovascular System Adaptive Reactions Peculiarities during Physical Activity according to the Type of Blood Circulation

Key words: *cardio-vascular system; type of blood circulation; static exercise; adaptive reactions, sex differences.*

Effectiveness of central hemodynamic urgent adaptive reactions of young boys and girls at the age of 18–22 years during physical activity according to the type of blood circulation is studied. It is proved that the type of blood circulation along with the age, sex, amount of physical activity and performed work determines the adaptive reactions character of cardiovascular system under the condition of repeated local isometric loading of increasing volume, performed till the refusal of the tested.

S.V. Rybkina, M.V. Belyakov
Methodology of Determination of the Sensitivity Spectra
of Wood Plants Seeds

Key words: *seeds; spectral sensitivity; optical radiation.*

The technique of determination of seeds spectral sensitivity is provided. The spectra of seeds of wood plants are defined.

V.I. Kochurko, E.E. Abarova
Soybean Yield Depending on Nitric Nutrition Conditions

Key words: *soybeans; nitrogen fixation; adaptive technology; yield; mineral nitrogen; variety; tubercles; symbiotic activity; fertilizer; symbiotrophic; seeds; option; plant; fruitification phase; productivity growth.*

The paper presents the results of three-year studies of optimal mineral nitrogen doses in the soybean cultivation technology on sod-podzol sandy-loam soils in the southern zone of the Republic of Belarus. The objects of studies were zoned soybean varieties Yaselda and Pripyat. It was established that the optimal soybean yield of 2,3–2,9 t/ha in field experiments were obtained using N_{45} nitrogen fertilizer dose. The mineral nitrogen inhibition by nitrogen-fixing bacteria becomes more apparent in the case of the variety Yaselda whose yield is 10,2% lower than the yield of Pripyat.

S.P. Evdokimov
The Spatiotemporal Zoning in Pleistocene Paleogeography

Key words: *paleogeography; space; time; zoning; Pleistocene; classification; periodization.*

The article deals with the problem of space and time in paleogeography. This problem primarily concerns chronological assessment of natural processes which took place in different parts of space. The analysis of the paleogeographical zoning schemes shows that the classifications rules are violated. For clarity of quality classifications the use of the trees of logical possibilities is proposed. The conclusion is made that paleogeographic development of zoning should be based on paleogeographic tendencies and laws, the characteristics of which are presented in the article.

M.A. Makarova
Large-Scale Vegetation Mapping and Applied Aspects of Vegetation Maps Usage (NW
Ladoga region, St. Petersburg University Field Station)

Key words: *geobotany; map; key sector; bush; forest; method; monitoring; vegetation; grass cover.*

Investigations were carried out in the Northern-West Ladoga region, the southern part of the Baltic Crystalline Shield. The landscapes of the region are characterized by alternation of granite ridges (selgas) and depressions, in which bogs, lake terraces and lakes are found. The purpose of investigation was to make an inventory and to map vegetation, to study the phytocoenotic diversity, to create the map of potential spruce forests. Quantitative

characteristics of the spatial distribution of actual and potential spruce forests are presented.

S.M. Malkhazova, T.V. Vatlina
**The Influence of Drinking Water Quality on Population Health
in Smolensk region**

Key words: quality of drinking water; population health; typology; mathematical and cartographic modeling; dynamics; environmental quality; sick rate; ecological pathology.

The article deals with the influence of drinking water on population health at the regional level. Spatial variability characteristics of sick rate were established on the basis of mathematical and cartographic modeling.

T.I. Pototskaya
Territorial Organization of Diamond Jewelry Auction Trade

Key words: Switzerland; Hong Kong; USA; UK; auctions; jewelry; diamonds.

The research consists of four main parts – the territorial organization of Christie's and Sotheby's auction houses, the commodity structure of diamonds embedded in jewelry sold by Christie's and Sotheby's auction houses, geographical features of the auctions trading diamonds at the world market, changes of the general and the geographical features of the Christie's and Sotheby's for the sales of diamonds, embedded in jewelry, under the influence of crisis in the global economy.

V.I. Chasovsky
**Cluster Approach in the Modernization and Development of Industry of the
Commonwealth of Independent States**

Key words: cluster policy; industrial cluster; modernization; technological park; network structure; territorial-production complex; innovation; branch.

The article presents a short description of the cluster approach in the strategy of innovative development of the CIS countries industry at the beginning of the 21st century. Regional assessment is given to the stage of adaptation of the concept «cluster policy» to specific national conditions of functioning of the government, industry, science and education, business and society.

MATHEMATICS AND TECHNOLOGICAL SCIENCES

I.B. Bolotin, D.A. Klimenko
**On the Solution of the First Basic Hilbert Boundary Value Problem
with Discontinuous Coefficients for Bianalytic Functions
for the Upper Half-plane**

Key words: bianalytic function; boundary value problem; upper half-plane.

The aim of this paper is to investigate one of the basic Hilbert boundary value problems for bianalytic functions. A constructive solution method for the first basic Hilbert boundary value problem with discontinuous coefficients for bianalytic functions for the upper half-plane is suggested. A closed-form solution to the considered problem is obtained.

G.S. Evdokimova

The Factors that Reduce Efficiency of the Queuing Systems

Key words: incoming flow; variables; the construction of mathematical models; intensity averaged over the period; admission procedure; periodic parameters; effectiveness of the system; average number of lost applications.

The paper presents a comparison of the characteristics of a real single-channel queuing system with variable intensities and a system with parameters, averaged over the period. The research proved that the efficiency of «averaged» service system increases.

E.P. Emelchenkov

Geometry over algebras of type $\langle 3 \rangle$. Incidence structure with parallelism

Key words: incidence structure with parallelism; parallel structure; affine Sperner space; partial algebra of type $\langle 3 \rangle$; affine partial ternary structure.

The so-called affine partial ternary structures are introduced or APT-structures presenting a very wide class of incidence structures with parallelism (AI-structures). Well known parallel structures and affine Sperner spaces belong to the class of APT-structures.

The method of algebraic description of APT-structures is suggested. Every partial algebra $\langle A; T \rangle$ type $\langle 3 \rangle$ corresponds to some incidence structure with parallelism. Any AI-structure generated by algebra $\langle A; T \rangle$, turns out to be an APT-structure. In this sense APT-structures are the most general affine incidence structures, assuming coordinatization by means of partial algebras of type $\langle 3 \rangle$.

E.G. Kiryatsky

On a functional on the class typically-real functions

Key words: unit circle; univalent function; typically-real functions; classes; coefficients of the functional.

This article discusses the properties of the functional introduced by the author on the class of typically-real functions. We also study other classes of functions. Particular attention is paid to the coefficients of Taylor.

K.M. Rasulov, A.N. Komissarova

On the Solution of the Boundary Value Problem of Neymann Type in Classe of Quasiharmonic Functions of the Fourth Genus

Key words: quasiharmonic function; the modified boundary value problem of Neymann type; differential equation of Euler; unit disk.

This article considers a modified boundary value problem of Neymann type in classes of quasiharmonic functions. We have received the conditions of solvability and the constructive algorithms of the solutions in the class of quasiharmonic functions of fourth genus in unit disk.

M.Yu. Lebedeva

Using the Method of Brown for Sales Forecasting in Marketing

Key words: method of Brown; forecasting; marketing; optimization; Excel; MathCAD.

The paper discusses various aspects of the computational method of Brown to solve the problem of forecasting the volume of sales in marketing. We propose the implementation of Brown's package of MS Excel spreadsheets and computer mathematics system MathCAD.

We present mathematical formulation of the method of Brown as a constrained optimization problem.

L.V. Pavlova, I.V. Romanova, T.A. Samoilova

The Solution of Philological Problems by Means of a Software Complex «Hypertext Search for Companion-Words in Author's Texts»

Key words: author's text; bookmarks; vocabulary; proximity interval; hypertext dictionary; companion-words.

The software complex «Hypertext Search for Companion-Words in Author's Texts» is intended for the automated processing of art author's texts for the purpose of detection of the companion-words accompanying each other in one or several author's works and allows literary critics to solve laborious problems: creation of the dictionary of the source author's text with indexes of hyperlinks to the corresponding word forms of the text; by means of the created dictionary to carry out a search for the companion-words located in the given interval of proximity in the source text. The main feature of the software complex is in the possibility of using large author's texts as basic data without preliminary processing. It can be used by literary critics, students of philology and university lecturers.

E.I. Pakhomov

Phenomenological Model of Rehbinder's Effect in Liquid Metal Environments

Key words: construction compatibility; Rehbinder's effect; adsorption; diffusion; viscous current; thermofluctuation; destruction; liquid metal embrittlement.

The approach is offered to determination of construction compatibility of metals with a possible Rehbinder's effect manifestation. Short generalization of results of Rehbinder's effect obtained for the last 40 years in the field of liquid metal embrittlement is made. The article presents the destruction structure model which is produced under the impact of liquid metals and gives a general interrelation of the main observed physical phenomena. In the kinetic aspect the process of destruction is presented in the form of five stages: adsorptions, diffusions, viscous current, thermofluctuation destruction of interatomic bonding, destruction at macrolevel. Special attention is paid to the stage of thermofluctuation destruction of interatomic bonding under the influence of adsorptive active atoms contained in liquid metal.

PSYCHOLOGY AND PEDAGOGY

N.P. Senchenkov

Pedological Study of Urban Placed Children in 1920-s

Key words: *pedology; complex of pedological research; ideals; children's interests/*

The article presents the analysis of pedological studies of ideals and interests of children from a number of schools in Moscow and Moscow region, as well as a number of pioneer organizations at the beginning of 1920-s. The study was carried out by the pedological laboratory at the Second Moscow state university under the supervision of I.A. Armyanov.

G.F. Glebova

Designing of Teaching using Individual Curricula in Secondary Schools

Key words: *design; individual study plan; multidimensional approach to design; small personally oriented group.*

The article discusses the problems of instruction designing on the basis of individual curricula, which is one of the areas of educational process individualization at school. Special attention is paid to the legal basis of such training, the nature of the multidimensional approach to the design and the problems of a small group as an object of a scientific study. The content of non-traditional forms of school management team in designing individual learning paths for students is used as the empirical data.

A.V. Chernykh

An Essay about a Picture as Means of Introduction of the World of Art Values to School Students, Learning at Home

Key words: *Russian language; speech development; learning at home; an essay about a picture.*

This article is devoted to the problem of speech development and introduction of the world of Art values to school students, who are learning at home due to various reasons. An essay is the leading means of speech development while learning Russian as the native language. Thus, one of the main tasks of school teaching is to introduce Art values heritage to school students.

V.V. Shabelnik

Formation of the Model of the Educational Environment of Higher Education Institution

Key words: *educational environment; education; personality; development; interaction; student; university; organization.*

This paper presents various authors' approaches to the definition of «educational environment», discusses its structural components, features, and performance. The author draws

attention to the potential of the educational environment, highlighting its internal and external resources, which to a large extent influence the formation of the personality of students during their training. The author also examines aspects of modeling the educational environment of higher educational institution.

A.I. Mironova

Specificity of Diagnostic Research of Seven Year Old Children Intellectual Development in the Process of Problem-Oriented Support

Key words: psychological support; problem-oriented support of 7 year old children; children with learning difficulties; intellectual development in the norm; regional standards of intellectual development of 7 year old children.

The given article discusses the specificity of a diagnostic research of the intellectual development of 7 year old children in the process of problem-oriented support. The results of diagnostics of the intellectual development of children, which were carried out by WIS test by D. Vexler, are presented. The research is aimed at solving the following problem. Would the 7 year old children with low situational or intellectual mental development have difficulties in learning at school?

The comparative analysis of the Federal and regional standards allows to work out a correctional-developing technology to assist the children with steady learning difficulties. The technology is aimed at the development of concentration and stability of attention, different forms of thought and mnemonic functions as well as activities demanding active cooperation of parents and teachers.

P.V. Sorochinskiy

Influence of Educational Virtual Reality in the Sphere of Biology on Thinking and Psychic State of School Students

Key words: virtual reality; educational virtual reality; influence of educational virtual reality on thinking; influence of educational virtual reality on psychic states.

The article presents the results of research of educational virtual reality (created using new virtual program «Unity») influence on senior secondary school students' thinking while answering and doing tasks in Biology (topic Protein synthesis) and on their psychic state.

E.G. Surkova

Features of the Individuality of Persons of Senior Mature Age, Realizing Themselves in Scientific Work

Key words: coping-process; adaptation; development of the person; mechanisms of psychological protection; coping-strategy; stress-induced personal growth; creative potential of the person.

In contrast to persons of mature age engaged in non-creative work, people who realize their creative potential in scientific area have higher survival index. They choose more productive coping-strategies when face difficulties in life and they are less inclined to use immature psychological protection. Mature and self-actualization attitude to life allows them to realize their creative potential.