

№ 1 2014

Question of present interest

Odyniec V.P. On the 10th anniversary of the Bologna process in Russia

A brief summary of Russia's participation in the Bologna process is presented. Performing aims of the Bologna Declaration of 1999 by Russia is analyzed.

Key words: purposes of the Bologna Declaration, European Higher Education Area.

Pedagogical Ideas

Dalinger V.A. Some important problems on training of bachelors and master's degrees at the teacher training university in multi-level education system

The paper studies the problems of 'bachelors' and 'masters' degrees training at the teacher training university under conditions of conversion to multi-level higher education system; the requirements for multi-level higher pedagogic education system are specified; the description of nonlinear system of training organization are given; the directions to change the technology of 'bachelors' and 'masters' studies are mentioned; the questions to be included in the course "The Maths' theory and teaching methods" and related to the implementation of new Federal National educational standards are specified.

Key words: teacher training university, multi-level higher pedagogic education system, technologies of 'bachelors' and 'masters' studies.

Moskvin V.A. The major elements of a university's work quality

In today's world there is a growing need in development and implementation of more advanced technologies for teaching students as well as its quality management systems. Based

on consideration of a modern university as a complicated social and economic system and analysis of relationships between its basic elements, it has been proved that if a task is set up to improve significantly the quality of teaching at universities, then today in the Russian education we need to count on the following three major components: high-qualified faculty's potential at universities, the best programs system and turn-out of top professionals.

It has been performed an analysis of vital elements, that should be taken into account to adjust a high school system for ensuring a high-quality education, and specific practical recommendations have been provided.

Key words: modern university, quality management system, high-qualified faculty's potential at universities, best programs system, turn-out of top professionals.

Aleksandrova V.G. Significance of integration in the content of the modern education

The article reveals the features of formation of innovative creative potential in the life of the school and University. Search new content of education puts in dire problem of awareness of the importance of integration as essential basis of all of the changes in the modern educational process. Particular attention is paid to the ability of each lecture is dialogue in each topic to find the highest spiritual and intellectual point, expressing the most important thought. Emphasizes that especially acute and urgent subject maximal openness towards other disciplines, in science and the arts.

Key words: education, integration, innovation, creative thinking, spirituality, pedagogical process.

Aleeva U.V. Vocational-pedagogical culture lecturer as a desk study

The article contains an analysis of the theoretical and practical foundations of vocational teacher's pedagogical culture, described the author's approach to the problem of its formation.

Disclosed and justified the four-component model of vocational-pedagogical culture lecturer. Identified methodological background to build a combined model of vocational-pedagogical culture teacher of high school.

Key words: culture, pedagogical culture, vocational-pedagogical culture, high school teacher, pedagogical creativity.

Reality of Pedagogical Education

Naumenko Yu.V., Naumenko O.V. The modern maintenance of technologies of schoolboys keeping health in preparation of the teacher

In clause essentially new conceptual base (“is offered to technology of preservation of health in formation”, “formation saving up health” and “formation forming health”, “readiness for optimization of viability in conditions of system social changes”), is shown its interrelation with other pedagogical concepts. The system of didactic principles of designing of a specific component of the interdisciplinary maintenance of the general education directed on formation at schoolboys of health and a healthy way of life as personal characteristics is concretized. Conceptual positions of complex psychological and pedagogical monitoring of efficiency of activity of school on formation at trained a welfare phenomenon “health” are formulated.

Key words: technologies of preservation of health in formation, readiness for optimization of viability in conditions of system social changes, formation keeping health and formation forming health as personal quality.

Experience of Practical Pedagogics

Kozhevnikov D.N. Complex use of models and model experiment in studying of natural-science disciplines

Article is devoted to models and a modeling method in the history of science and pedagogics. The role of model experiment in scientific knowledge is considered. The place of model experiment in a triad of process of knowledge is defined: experiment (Э) – model (М) – the theory (Т). Short classification of training models is given. The pedagogic-ergonomic demands made to a training model are formulated. The basic algorithm of formation of a complex of models is shown. Use example in training of koltsegranny models of atoms and molecules is reviewed.

Key words: training model, triad: experiment – model – the theory, model experiment, complex of models, pedagogic-ergonomic requirements, image-model, polymodel interpretations.

The Voices of the Youth

***Kalinina A.I.* Distance learning as a part of life-long learning system and the role of self-education in distance learning**

The article represents the specific features of distance learning in terms of the lifelong learning system and suggests the arguments in favour of shaping the self-education skills as the key to effective implementation of the distance learning.

Key words: distance learning, lifelong learning, self-education.

Foreign Life and Distant Land

***Smolinska O.Ye.* Principles of organization the cultural and educational space of university**

Specific principles of organization of cultural and educational space of university were chosen and characterized in this article with the theoretical and methodological positions.

Cultural conformity, environmentalism, homeostasis and anthropologies are investigated in the field of modern integrative scientific and pedagogical approach.

Key words: principles of organization, cultural and educational space, university.

№ 2 2014

Question of present interest

Tyulkov I.A., Gritzuk Ya.A., Lunin V.V. Pedagogical component of classic chemistry education in university

The article describes the current situation of teacher training for chemistry teacher in schools and universities. Presents the interaction experience of Chemistry Faculty with Faculty of Teacher Education, Moscow State University. Shown that at the Chemistry Faculty assembled a unique methodological material on the organization of competitions in chemistry at various levels. Within the program “MSU – School” is working to improve the skills of chemistry teachers of secondary schools in Moscow.

Key words: training of educators, teaching chemistry, professional development of teachers.

Pedagogical Ideas

Monakhov V.M., Firstov V.E. Building classification educational measurement based psychological principles

Based on the principles of synergy marked innovative approaches to the formation of educational measurement classification as one of the most important elements of the modernization of national education. Classification is based on the system of psychological principles containing anthropological principle K.D. Ushinsky, the principle of economy of thought Mach, the principles of self-organized criticality and functional specialization of the cerebral hemispheres. Classification principles reflect certain properties of human activity, in which there are two types of logical thinking - formal and intuitive classification by defining the logic implemented in the measurement of the object.

Key words: synergy, education system, educational measurement, classification, activity, intuitive thinking, formal logic, fractal and fuzzy measures, attractor goal, modernization of education, information.

Erovenko V.A. Culture's dialog in the humanitarian and mathematical education

At the first time the idea of the culture's dialog appears in the XX-th century. Appeal to the dialog is inevitable and may be the only alternative to the spiritual violence. Although the dialog of "two cultures" requires much time for detailed discussion of different viewpoints it should be started immediately. This problem is actual for the mathematical education of the humanists because the social and humanitarian knowledge despite of the shocked post-Soviet crises continues to hold ideological positions in the higher educational system and is still able to be a foundation for the spiritual and intellectual evolution of the students.

Key words: culture's dialog, social and humanitarian knowledge, mathematical education.

Mikhailova N.V. Mathematical knowledge and its explication in the philosophy of education

The philosophical analysis of mathematical knowledge, which is in the basis of the philosophy of mathematical education, is made in this paper. Mathematics with the help of its directions of foundations is the form of expression of the most important laws of well-developed scientific theories. That's why the biggest value of mathematics in the development of knowledge is that the inner organization and structure of humanitarian and natural scientific theories is expressed in the abstract language of mathematics.

Key words: mathematical knowledge, philosophy of education.

Ponomarev R.E. Summary of education in the cultural dimension

The article discusses the concept and essence of education. The author analyzes the problems of using this concept. He defines education as the growth of cultural content.

Key words: concept of education, essence of education, problems of education, growth of cultural content.

Reality of Pedagogical Education

Anokhina G.M. Willingness to implement teacher education individually oriented model of schooling

The paper describes the model of the educational process, in which the conditions and mechanisms are implemented on demand discovery and development of personal and creative potential of students. Conditions and mechanisms of the regularities are: the psychology of child development as a subjective reality, as individuals, the psychology of knowledge and didactics in the construction of the educational process. Technology disclosed individually oriented educational process, forming personal, meta-subject, object results in class, different from the

traditional in structure, methods, and types of activities, teacher training and student learning.

Key words: case-search methods, methods of dialogic communication, the situation of the individual, situation-search engine, lesson-search, discussion-group activities.

***Yakusheva S.D.* Intuition in professional activity of modern proficient teachers**

The article is devoted to pedagogical intuition as one of the unique capacities of a modern professional pedagogue, providing attainment of truth in its intellectual and emotional sense. Intonation belongs to a category of individual professional qualities, which discloses the core meaning of teachers' personality-related centration and makes it a corner stone of teachers' creative initiatives.

Key words: personality, pedagogical activity, proficient teacher, intuition

Experience of Practical Pedagogics

***Ovchinnikov A.V.* Educational programs evaluation as used in the last law on education in the Russian federation**

The author does analysis of educational programs evaluation current status in Russian Federation; points on low level of the legislative base; formulates the new definition of what is educational program; points on necessary of development of educational program evaluation institution in RF.

Key words: educational program, educational programs evaluation, analytical report for educational program, educational results, curriculum.

***Pugachev I.Ju.* Pedagogical integration of scientific knowledge on the physical working capacity of students of high school**

Examines the scientific views on the notion of “Physical Working capacity” trained high school based on the integrative approach to the phenomenon, a theoretical analysis of its essence by leading researchers. The system is based on a generalization of the Allied Sciences of optimum suitable content structure of Physical Working capacity, which includes a set of interrelated components that combine physical development, functional status of an organism, physical training.

Requirements for the directivity of the physical training of the students are substantiated — to priority development of coordination abilities and endurance. It is recommended that prospective inclusion of the target criterion of ranking of higher education institutions.

Key words: high school, trainees, physical working capacity, integration, structure, directivity, relationship.

The Voices of the Youth

***Shirokov D.V.* Video tutorials: didactic features, classification and legal issues of development and distribution**

Effective organization of cognitive activity is one of the key tasks of modern education. Actual approaches to its solution are associated with the use of information innovations, in particular with the use of advanced multimedia resources, among which a special place is occupied by video tutorials. Simplicity of development and high efficiency of tutorials as an innovative learning tool has been awarded by many Russian and foreign teachers. There is an experience of the successful use of multi-format video tutorials at all levels of education. There are five main types of tutorials, published online: the slide show, screencasting lessons, animation, digital video of the drawing process and the “live lesson” video.

Key words: video tutorials, slide show, screencasting, multimedia.

***Gromalova N.A. The relationship between life's values and training
successfulness of MSU students on Geological Faculty***

In this investigation based on our experimental study among the first-year students and graduate students of the Moscow State University the conclusions were obtained about the specifics of student's value orientations (the study of dominant values, living spheres, orientation of the individual), as well as its compliance with their training successfulness. In this regard obtained results could be useful for educational process of the geological department of the Moscow State University.

Key words: system of values, life values, training successfulness, the Higher School.

Foreign Life and Distant Land

***Namazbaeva J.I. Cultural-historical psychology as a basis of the humanization
of the education system in Kazakhstan***

The article elucidates the importance of psychological science and practice for Kazakhstan society development. The problems of personality, human potential and psychological situation in the society are indicated. Current psychological issues of education in higher educational organization are reflected. The breakthrough trends of psychological science and practice will result modernization of current society.

Key words: humanization of society and education, the problems of personality, human potential, culture and socialization, issues of education in the university, perspective directions of psychological science.

Question of present interest

Kaplunovich I. Ya., Kaplunovich S.M., Sitnikov V.L. Theory, terminology and language of psychological and pedagogical sciences

The study is grounded in ineffectiveness and even harmfulness of the use of everyday language and terminology regarding psychological and pedagogical sciences. The authors deny the differentiation of exact and inexact sciences. The study proves that psychological and pedagogical sciences are not much inferior to mathematics and physics in scientific nature and rigor. The authors suggest the use of firm alphabet notion building and adequate terminology level explanation to increase the authority and prestige of psychological and pedagogical disciplines.

Key words: terminological level, exact sciences, alphabet of notions, everyday language and sciences language.

Ponomarev R.E. Typical mistakes in science pedagogical research

The article discusses the pedagogical research. The author analyzes the typical mistakes of scientists in the formulation of the problem, objectives, during the nomination and test the hypothesis.

Key words: scientific problem, hypothesis, pedagogical research, typical mistakes and difficulties.

Pedagogical Ideas

Smirnov S.D. Measures of students' intellectual potential as predictors of success in HEI studies

The article covers the analysis of psychological factors of success in student's studies. These factors are measured with psychometric methods as well as techniques of external direct

assessment and self-assessment. The results based on modern methods of holding an experiment and data processing (longitude method, structure modeling, metanalysis etc.) are available to show opportunities of using psychological measures as predictors of success different aspects and stages of studying.

Key words: predictors, success in student's studies, psychometric methods, external direct assessment and self-assessment, psychological factors of success in student's studies.

***Ryblova A.N.* Methodological bases of teacher managerial activity in the system of higher education**

The article presents methodological bases of the teacher managerial activity in the system of higher education. The author describes in details the realization peculiarities of such functions as planning, organization, leading and control, gives recommendations to teachers for effective usage of them in the learning process of university.

Key words: managerial activity of teacher, functions of management, planning, organization, leading, control.

***Fokin Yu.G.* Goal setting and objectification of the results of studies under the competence of reference**

Specification of these features of goal-setting and objective evaluation of the results of a specific class in high school point to the possibility of an indirect estimation of the course of becoming a given jurisdiction by analyzing manifestations of professionalism in assessing the significance of the studied student learning material for his future work destined position.

Key words: specification of the skills levels of assimilation of the specified task of the classes specified program, objectification, objectively diagnosed by the results of the tests of achievement, the rating evaluation of the manifestations of professionalism, the comparison of

the immeasurable qualities, quantitatively estimate of the equivalent of the quality of the object, role-based estimation of the dynamics of formation of specific competences.

Reality of Pedagogical Education

***Bazhenova K.A.* The trial of educational situation design for students of undergraduate course of pedagogy**

The article present basic terms of educational situations creating for students of undergraduate course of pedagogy. An educational situation is considered as the necessary things to initiate students' reflection of the trial performed. The terms of an educational situation is constructed on the basis of hypothesis that assimilation of pedagogical content by students is possible in an activity vein. Results derived testify that students, who take part in experience, plan trials of themselves formation as pedagogical professionals consciously and purposefully as opposed to students, who refused to participate in the experiment.

Key words: professional pedagogical trail, educational (reflexive) situation, students undergraduate course of pedagogy.

Experience of Practical Pedagogics

***Lisichkin G.V., Orlova S.I.* Residue chemical knowledge of the secondary school graduates**

The article is dedicated to identify the level of knowledge of the secondary school chemistry course by the freshman class students of the humanitarian faculties at the Chelyabinsk State Pedagogical University, whose chemical education was concluded in the secondary school. Test method was used to evaluate the knowledge level. An integration test, including main units of the chemistry school program, was developed. It was established that the largest knowledge gaps relate to the "Organic chemistry" and the "Calculation of percentage

concentration” units. The situation with the “Elements and inorganic compounds” unit is relatively better. A range of three main levels was obtained, including: “reproduction” — 78% of the correct answers, “application of the knowledge to the standard situation”— 58%, “application of the knowledge to the new situation” — 25%. Recommendations for the chemistry teachers and the methodologists have been formulated.

Key words: secondary school chemical education, residual knowledge of chemistry.

Antonovsky A.V., Balakshina E.V. Teachers professional self-actualization

This article is dedicated to the results of empirical research of features of self-actualisation of teachers of secondary schools. The comparative analysis in self-relation level, valuable orientations as important components of professional self-actualisation of teachers at different stages of professional formation is carried out.

Key words: pedagogical activity, self-actualisation, the self-relation, Valuable orientations.

Events and years

Stepanova M.A. Activity theory of learning: current status and prospects

The article presents the lines of work of the International Scientific Conference; named “Activity theory of learning: current status and prospects”, held at the Department of Psychology of the Moscow State University and dedicated to the jubilee of N.F. Talyzina, professor and academician of the Russian Academy of Education. Methodological and theoretical issues related to the development of activity theory of learning, psycho-pedagogical conditions for efficient acquisition of knowledge and development of personality, as the subject of learning activity, as well as motivational aspects of educational process were reviewed in the course of the Conference. The Conference stressed the significance of the activity theory of learning for educational practice and raised problems to be solved by scientists.

Key words: conference, activity theory of learning.

The Voices of the Youth

***Kalinina A.I.* Development of the ideal self-education model**

The article represents the fundamental differences between the “self- education” notion and other semantically related terms that appear to be the interconnected components of the self-education model. In conclusion, there is the scheme of the ideal self-education model.

Key words: scheme, model, self-education, self-learning, self-upbringing, self-development, self-actualization, self-realization.

Foreign Life and Distant Land

***Zhong Minghua.* Civil education in People’s Republic of China in the context of civil society development**

Civil education in the present-day China is not a radical change of the traditional education but a continuation and improvement of the traditional civil upbringing. The tasks being set are to create a joint field of “favorable interaction” between the citizens and the State, where desire and possibility of the citizens to participate personally in the political life, protection of the citizens’ personal interests, public confidence and cooperation will be developing. The specialists should understand a close link between self-affirmation and public recognition, between egoism and cooperation.

Key words: civil education, civil upbringing, civil society.

Question of present interest

Borovskih A.V. Social and pedagogical concept of game

The problem of the use of games in education is considered. Address issues related to the understanding of the nature of the game, with the functions of games in education, with the correctness of their use, with the social context, with teaching responsibilities.

Key words: game, education, teaching result, interactivity, reflection

Pedagogical Ideas

Lisichkin G.V. Is “Methods of teaching” a defective science?

The article describes some points of theses on teaching methods. It is stated that teaching is a specific kind of human activity which cannot be a subject to the same assessment criteria that are commonly used for the natural sciences.

Key words: science, thesis, teaching method.

Kuptsov V.I. An issue of value orientation of the modern education

While discussing questions of human nature the article states that person's culture is formed not only by the education system but by the society in general. The article gives a lot of examples of antihuman ways of life in various societies from ancient times to the present. Human development has to take priority over mass production for the society, that's how priorities should change for the educational system particularly and for the society in general.

Key words: value orientation, ideology, society, educational system, priorities.

Verbitskiy A.A. Cognitive interest in contextual educational environment

The article considers the problem how cognitive interest appears and develops in the contextual educational environment. Six psychological-didactical conditions were identified. They together with material components make up the context educational environment. The article also reveals the essence and principles of the contextual education.

Key words: cognitive environment, the conditions of cognitive interest development, the principles of the contextual education, contextual educational environment.

Sukhodolskaya-Kuleshova L.V. Morally-aesthetic context education potential of the spiritual culture to personalities

In article spiritual culture is presented as qualitative feature morally person. Morally-aesthetic context education potential expects wholeness, comprehension to need to spiritual reformation with handhold on base value, presentations spiritual unity mankind on base moral and aesthetic to activity; the account of the new type to integrations, appearing in modern world.

Key words: spiritual culture, morally-aesthetic context, education potential, morally-aesthetic abilities, spiritual activity subject, mechanisms of the development of the spiritual culture.

Reality of Pedagogical Education

Novakovskaya Yu.V. On the “Concept of the support of development of pedagogical education”

“Concept of the support of development of pedagogical education” proposed by the Ministry of Education and Science of Russian Federation is discussed. It is noted that in this document, there is no detailed systematic analysis of the current situation in the sphere of education and the ways of solving the problems. The basic principle of recruiting the most talented graduates of pedagogical institutes as school teachers is formulated as follows: the

current ideology of the state, which consists in personal enrichment, should be replaced with the ideology of increasing cultural and intellectual level of the whole society. It is stressed that training specialists should be based on well thought-out definite plans of teaching different subjects, necessarily including the profound studying of psychology. It is pointed out that both “independent” certifying of pedagogues and training managers with no special basic pedagogical education is absolutely inadmissible.

Key words: pedagogical education, training specialists, systematic analysis, psychology, certifying of specialists, managers, intellectual development

Events and years

Kuz'menko N.E., Lisichkin G.V., Rozov N.Kh., O.N. Ryzhova O.N. A Teacher's

Almanac first published by MSU's Faculty of Chemistry celebrates anniversary

This article is dedicated to the tenth anniversary of a “Natural Science Education” Almanac that was started with the help of the International Mendeleev Chemistry Olympiad. Now it is a quite prominent, authoritative and often quoted edition. The Almanac includes a selection of highly informative articles dedicated to the various issues of such spheres as teaching, didactics, educational policies, organization of educational programs (not only for chemistry but also for other natural sciences and mathematics), methods of teaching chemistry in schools, institutes, universities, as well as Olympiads, programs for gifted students and international exchange of experience in education field.

Key words: International Mendeleev Chemistry Olympiad, natural science education, aspects of teaching, didactics, educational policies.

Experience of Practical Pedagogics

Novikova G.V. Professional health and labor motivation of teachers

This article describes the relationship between the preservation of professional health educators and dominant labor motivation. Concluded that teachers, who do not have a dominant motive of labor, which flexibly adapt to the changing conditions of the educational environment, and those teachers, who have dominates the motive of self-improvement in the profession, much easier to maintain professional health than teachers who have other types of motivation .

Key words: professional health, labor motivation, the dominant motive, types of labor motivation.

Studenova T.Yu. Transformation of mathematic models in empirical interpretation

The subject of mathematics is spatial forms and quantitative relations. The problem is how real objects become “spatial forms” or how qualitative determinacy of objects of study transforms into quantity and qualitatively determined relations between objects turn into qualitatively determined. The paper tackles the problem of correspondence of mathematical and empirical models as well as associated with it, transformation of model elements that leads to a phasal change of models in the course of empirical interpretation.

Key words: model, empirical interpretation, invariant, qualitative determinacy, formal knowledge, informative knowledge, underlying idea.

The Voices of the Youth

Gromalova N.A. The relationship between life's values and training successfulness of students

In this investigation based on our experimental study among the first-year students and graduate students of the Moscow State University the conclusions were obtained about the

specifics of student's value orientations (the study of dominant values, living spheres, orientation of the individual), as well as its compliance with their training successfulness. In this regard obtained results could be useful for educational process of the geological department of the Moscow State University.

Key words: system of values, life values, training successfulness, the Higher School.

Foreign Life and Distant Land

Krivtsova S.V. Phenomenological pedagogy

There is pedagogical direction, inspired by Husserl phenomenology and existential philosophy appeared in Holland in the 60-ies of 20 sent. The paper describes the principles and essential phenomenological psychology, the main theme of which is the understanding of the subjective world of the child's soul and a description of the child's experiences. Phenomenological pedagogy ideas had a great impact on the education system of the European countries, and have not lost relevance today.

Key words: phenomenological method, the experience of childhood, preverbal experience, understanding, ethical principle of bias.