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EMPLOYERS' AND EDUCATIONAL INSTITUTIONS' COOPERATION MONITORING

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The Tver Region has a particular employers' and educational institutions' cooperation experience acquired through the publication of the reference book "The best HEI graduates of the Tver Region", the reference almanac "For those who are looking for work", holding a competitive tender of employers "Commonwealth", the organization of "round tables" concerning the regional human resource potential use problems. But besides the given actions a further stimulation of the cooperation of the labour market representatives and educational services on the ground of the information obtained by means of the given markets' monitoring is possible. The emphasis at the given cooperation should be made on the formation and management of the informational connections and flows, information networks throughout the Tver Region. The given markets' interaction product can be the regional base of the educational institutions and training specialties; the actions aimed at the popularization of the specialties necessary for the regional economy (with the participation of employers); and also the support of the employers' various initiatives to promote the specialties required in the Tver Region. Not a passive perception of the situation and its discussing within the framework of panel discussions and meetings, but an active participation and changing the current situation to positive transformations is very important in the specified problem.

The author of the article, Kuzmina Asya Anatolyevna, was a participant of the contest of the Tver Region's young scientists' research programs of the Tver Region Committee concerning Matters for Young Persons " as part of the target program "Youth of Upper Volga Region by 2006". The purpose of the given project was to formulate the supply in the sphere of realization of effective directions of interdependence of

the labour market and vocational education educational services market. The project was realized on the basis of the Tver Branch of the state educational institution of higher vocational education "The Moscow State University of Economics, Statistics and Information" (MESI) for the period from January, 2007 – to July, 2008.

Let us mention briefly the key moments of the research.

Every region should have a certain quantity of human capital possessing a certain necessary qualitative characteristics for its functioning. The demand and supply balance in the labour market allows the region to possess a necessary economic independence, soundness and development steadiness.

The educational service market performance at the present development stage should solve urgent problems of the activity efficiency promotion in providing the economic balance in the regional economy and the interrelation with other elements of the regional market. Theoretically, the educational complex can provide not only the formation and development of the human capital (its restoration and support at the desired level proceeding from the economy demands), but also the economic system equilibrium. To perform these functions the understanding that not only a personal demand for receiving qualification is satisfied, but also the social want for qualified labour forces. That is why the efficiency of educational services should be estimated by not only the factors of quality and availability, but also the correspondence to the demands on the labour market.

The human resources administration requires a constant monitoring of the labour market and educational service market, among them the data of the demand and supply equation of labour forces on the primary activity and skill level concerning specialties,

branches, territories and also information about the causes of imbalances of the given markets.

In the Tver Region there are significant industrial differences regarding for the surplus/shortage of experts graduated from vocational education institutions. In traditional industries of the Tver Region there is a great shortage of young specialists. The leading position is occupied by the vacancies in such economy branches as: machine building, light industry, agriculture. The wanted vacancies reflect the sectoral structure of employment, where historically the leading position, the “core of economy” is occupied by the industry and agriculture. Employers have to fill vacancies at the expense of both released personnel from other enterprises and attraction of migrants having no necessary professional characteristics. On the other hand, there is an evident surplus of specialists. The leading position in the surplus production of specialists is occupied by the specialties – economics, management, jurisprudence. When commenting the given situation one can mention that the claims of enrollees at the entry to an educational institution of professional education are established at the level of stereotypes, and not on the labour market demands knowledge. The institutions of vocational education being geared to the population needs perform educational services on popular educational programs. But the specified cooperation breaks the labour market needs. That is why theoretical developments on the situation improvement by means of introduction of target preparation of specialists into practice with the direct involvement of enterprises and organizations for the purpose of orientation of the future specialist to the tasks and needs of the Region don't find the proper practical realization.

Undoubtedly, a part of the cumulative demand and cumulative supply in the labour force market is satisfied. But, by virtue of the labour force movement (for a variety of reasons) – a part of the resource turns out to be free and needs to connect the demand and

supply. The current trend to outrun the labour market clearing demand for specialists with higher vocational education at an essential deficit of the number of basic and intermediate vocational education specialists testifies that the market of professional education stops meeting the regional economy requirements concerning the human resources training.

Within the framework of the grant realization there was a polling of heads of vocational education institutions and employers (for the period of September-November, 2007) held. The territorial coverage of the forwarding on the project “Development and realization of educational service and labour markets interdependence monitoring concept within Tver Region” was represented by the data given below.

Into the forwarding there were 70 institutions of vocational education of higher, intermediate and basic levels of training located in 20 cities and 5 small towns of the Tver Region included. From 20 HEIs entered the distribution list – there are 10 state institutions of vocational education (8 branches among them), 10 non-state ones (8 branches among them). From 50 ISEIs included into the forwarding – there are 4 colleges, 15 lycеums, 31 specialized schools. 100 addresses (industry – 61%, agriculture – 30%, service – 9%) were included into the forwarding for employers, territorially represented in 21 cities and 15 rural areas of the Tver Region.

The results analysis of the polling of heads of vocational education institutions of vocational education levels and employers are represented by the following data.

The employers' regard for the perspective of experts demand for the nearest 2-4 years is of great interest. To the employers' mind, the most wanted experts are found out in such branches of economy as: construction, finance and credit, industry (Fig. 1) (listed descending).

The employers polling found out quantitatively predominant age groups of employees (rating on respondents' answers electively) – 45-49 years old, 35-39 years old,

55-59 years old. The data (represented in Fig. 2) can serve to illustrate the debate in MSM, where the fact that the “major part of factory workers approaches to the preretirement age”

is the question of the hour. According to the educational criterion the groups of workers with the intermediate and basic vocational education dominate.

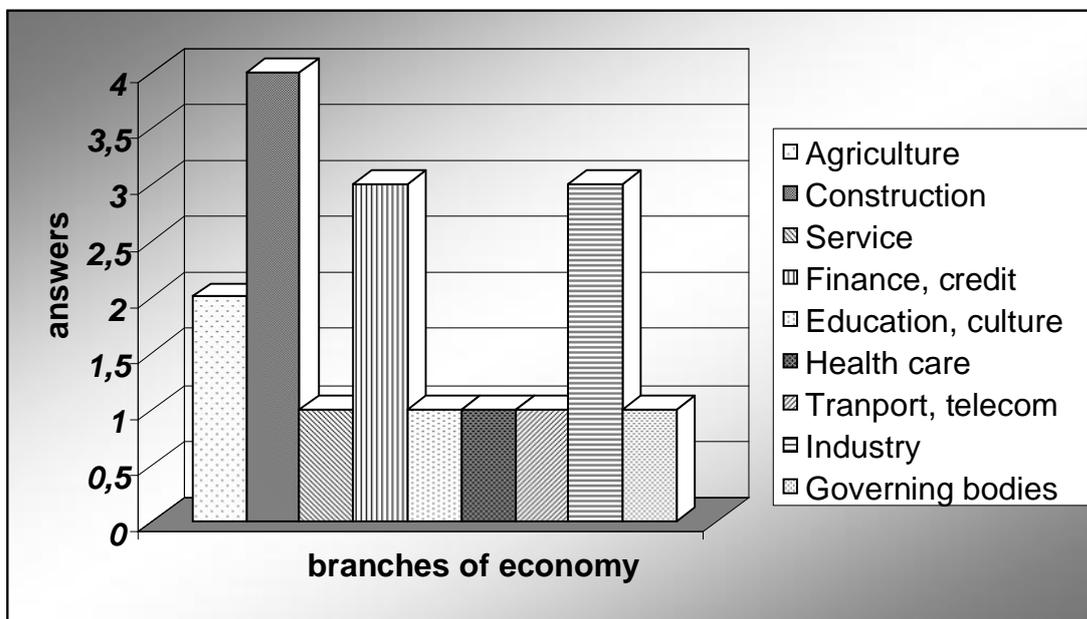


Fig. 1. Results of answering the question of the polling “Which branches of economy experts will be mostly demanded in 2-4 years?”

In the polling addressed to employers and heads of educational institutions there were questions allowing comparing the regard of these groups’ representatives for the “painful points” at the cooperation.

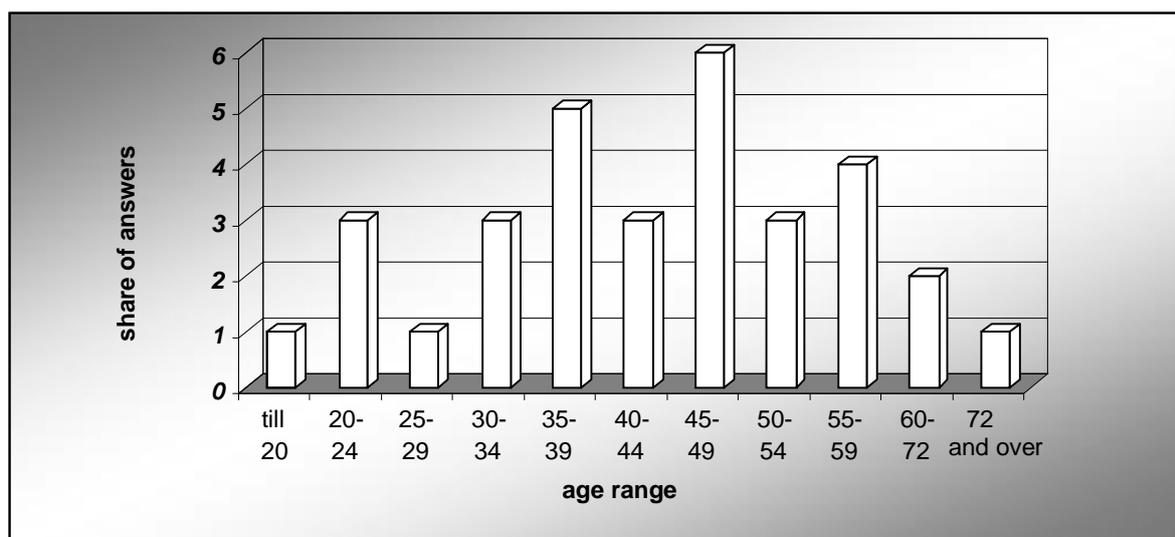


Fig. 2. Results of answering the question of the polling “Determine the dominant age criterion of factory workers.”

The search for new human resources at enterprises is carried out through the “publication in the MSM and internet” – 100% of the respondents’ answers; “through the employment service” and “using the potential of the enterprise (professional development, re-education)” – 62% of the respondents’ answers. Appealing to an educational institution is practiced in 12% of the respondent employers only.

When answering the question “How do you evaluate the employment possibilities of graduates in the labour market?” 100% of the respondents (heads of educational institutions) chose the answer – “They are able to be employed in the regional labour market”. When estimating the young specialists’ competences, 28% of the respondents think that the “knowledge and skills being got correspond to up-to-date requirements of the employer”, and 72% take up the position that the up-to-date requirements of the employer can be satisfied with a further corporate training, but the specialist’s basic skills correspond to the labour market demands”. But when estimating the competences of educational institutions’ graduates coming down to enterprises as employees, the tendencies were depicted, when a “speciality doesn’t correspond to the declared job opening, but there is an experience of work in the given sphere or an allied trade” and “a need for the continuation of training to work at the enterprise”.

Practically all the employers found the deficit of young personnel a problem (87,5% of the answers). An underpayment (62,5% of the answers) and labour conditions dissatisfaction (25% of the answers) are mentioned as the cause of this phenomenon. The obtained data can be commented as follows: there is a pent-up demand and excess offer of labour forces simultaneously in the same professions. On the one hand, the qualification of pretenders does not meet the requirements of employers, and on the other hand, the supposed rate of remuneration doesn’t meet the worker’s wants.

Employers mark out “getting a speciality not associated with a further employment”, “the runoff of young specialists from the region” and also “training on the trades expendable in the regional economy” as problems in the sphere of vocational education. Heads of vocational education institutions marked out other topical problems existing in the area of vocational education. In the comments to the inquiry form there also mentioned the problems not included into the check-list of the offered answers, associated with the demographic situation, teachers’ underpayment, low level of basic (school) training. No one of the respondents chose the answers “getting a speciality is not connected with a further employment” and “low quality of specialists’ training” as a problem, and 14% of the respondents offered the opinion that there are “no evident problems”.

Thus, it is necessary to remember that not only a personal need for a quality training, but a social want to get labour forces meeting the requirements of regional economy at the same time are satisfied, when receiving an educational service.

In the public opinion a check-list of prestigious professions defining the demand for educational services has been formed for several years. But the given “prestigious” rating among applicants and their parents is not annually corrected on the part of the labour market: the population employment according to the branches of economy, personnel production overage, the demand for specialists according to the educational level. The labour market and the market of educational services have no constant information relations.

An objective analysis of the monitoring data of the regional labour and educational services markets will finally allow planning the ways and mechanisms of the given markets’ cooperation for the maximal satisfaction of both educational services consumers’ requirements and regional economy demands for human resources.

TO THE QUESTION OF CORRELATION BETWEEN KNOWLEDGE AND COMPETENCE APPROACHES TO EDUCATION

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The author of the article starts by giving a brief outline of the two currently existing approaches to education. The previously generally recognized "knowledge-abilities-skills" paradigm is more often than not opposed to the competence approach, which is incorrect due to a number of reasons, for instance the cognitive basis of all competences. Moreover, it must be mentioned that knowledge and practice constitute two parts of a single process.

The competence approach, though, is not devoid of problems, which presents difficulty for its effective realization. Therefore, it is probably advisable to try and develop the educational model comprising both approaches. To give better understanding of the correlation between those the author also presents other scientists' views of the nature of the notion of competence.

Present stage of development of education is characterized by formation of new paradigm of result of education. The long existing "knowledge - abilities - skills" - paradigm of result of education" included theoretical basis, definition of the nomenclature, hierarchy of knowledge, abilities and skills, techniques of their formation, control and assessment. This paradigm used to be generally accepted by pedagogical community and still is, by its part. However, the changes taking place in the field of the aims of education in the world and Russia, correlated, in particular, with a global task of facilitating a man's entry in the social world, his productive adaptation in this world, cause the necessity of stating the question of education providing a more complete, personality oriented result. Thus the concept of "competence" [2, p. 3-4] has served as a general definition of such an integral social - personal - behavioral phenomenon as the result of education, all motivation-value, cognitive components taken together.

How right is the statement that the competence approach has cardinally innovative character? In many publications the competence approach is viewed by the authors as the opponent of the conceptual triad of "knowledge - abilities - skills", established in the Russian pedagogics.

The incorrectness of categorical opposition of the "knowledge - abilities - skills"

and competence approaches is reflected, in our point of view, in the following points:

1. "The cognitive basis of all competences is the scientific knowledge" (from the conclusion made by the substantiation of the project of the typical competence standard of the higher vocational education) [3].

2. The principle of submission of knowledge to ability and practical necessity, examined as the main feature of the competence paradigm, did not appear in the "information society" of XXI century and not at the last stage of development of modern education (The requirement "that all should to be done" by means of the theory, practice and application had been proclaimed by J.A. Komensky [4]).

3. The adequate training demands precise allocation of knowledge as independent purpose of educational activity and also representation of knowledge in the form of logical coherent system, since without regular development of knowledge no effective formation of abilities takes place.

4. Knowledge and practice constitute two parts of the single process of the world development. Knowledge is considered to be a peculiarly discrete moment of practice. The theory constantly expands opportunities of practical activity, promoting development of new abilities and competences. Practice gives impetus to the development of knowledge.

Unsolved problems of the competence approach produce difficulties for its effective

realization; they are serious enough and can be formulated as following questions:

1. How can the competence standard be operated? Is it possible, within the competence approach, to present the process of mastering the educational material, the procedure of monitoring its results as a sequence of steps?

2. What are the specific competence requirements to results of the pupils' training? How can we avoid ambiguity, subjectivism, certain abstract wishes, comeback to "knowledge" approach while formulating didactic units of the "competence" standard?

3. How can the influence of the "knowledge - abilities - skills" and competence approaches be reflected in the vision of social development prospects? What should be correlation of accents in understanding of importance of two abovementioned approaches in the aspect of recognition of priorities in the Russian educational system?

While searching for the answer to last question, our attention was attracted by A. L. Andreev's view. In his opinion, "the competence approach does not only touch upon didactics, technique and organization of the educational process, but, in its essence, it is also a *social strategy* focussed on the sphere of education" [1, p. 23], connected with adaptation of educational tasks to some particular features of social - historical situation. We can realistically claim that the accent that is on a priority role of transfer of knowledge as unconditional foundation of education is based on the official recognition of the cognitive process, knowledge, education as true values.

Taking into account the fact that the project of modernization has not developed yet and the society has to linger in a situation of historical uncertainty, it is necessary to create such educational system which will be capable of solving *tasks of different type*. A. L. Andreev puts forward an idea "of two-segment educational model, in which studying of fundamental disciplines, traditional for the Russian education, is combined with applied knowledge of the social - technological

orientation" [1, p. 26]. The set of fundamental disciplines constitute the foundation of global, systematized understanding of social reality. Mastering applied social knowledge is aimed at acquisition of certain competences. Such an approach allows to recognize each approach as having its own place in the general process of the Russian education improvement.

What is said does not mean hopelessness of competence approach problems but specifies normative -expedient correlation between "knowledge" and competence approach. Accordingly, understanding the necessity of the given problematic development, we do believe it is significant to emphasize the following points.

We accept the opinion of the scientists (J. I. Dick, E. V. Titov, A. V. Chutorskoj etc.) who consider that the core competences should be viewed as the component of the personality-oriented educational paradigm [6; 7]. Applying the competence approach to the educational process on the whole and to pupils' activity, S. N. Tchistjakova notes that readiness as a quality which includes knowledge, abilities, skills, motivation for particular actions can be named as "a functional condition of a person, the result of the mental processes preceding an activity" [8, p. 9]. Readiness for an activity can be presented as the educational competence in the context of the personality-oriented education paradigm, which is characterized by A. V. Chutorskoj as "the set of the interconnected semantic orientations, knowledge, abilities, skills and experience of pupil's activity, that is necessary for the realization of personally and socially significant productive activity in relation to a certain circle of the objects of reality" [7, p. 143].

Core competences as a desirable result of education do belong to the personally oriented paradigm, which is clearly seen from the grouping of the competences according to their kinds, offered by Zimnyaya; it must also be taken into account that "competences are some internal, potential, hidden psychological new formations: knowledge, notions,

program (algorithms) of actions, system of values and relations which then are reflected in a man's competences" [2, p. 8]. According to the viewpoint, I. A. Zimnyaya differentiates three basic groups of the competences: competences concerning oneself as a personality, as a subject of vital functions; competences concerning a human's interaction with other people; competences concerning a human's activity, manifested in all its types and forms [2, p.8]. Such a classification seems rather expedient in the way of maintaining the unity of pedagogical and psychological aspects of the pupils' education.

What has been said cannot but draw the attention to the fact that a teacher's ability to form pupils' core competences will be entirely dependent on the level of his readiness for realization of the personally oriented approach in pedagogical activity.

One more aspect of the discussed problem is of interest.

The nature of competence, in J. Raven's opinion, which we would like to agree with, is that it can only be revealed in an organic unity with man's values that is on condition of man's deep personal interest to the given kind of activity. In this sense, according to G. Raven, competence acts as a major substantial basis allowing to formulate four main consequences about the necessity of:

- reevaluation of views on each child's abilities, as all pupils may become competent, having made their choice in the wide spectrum of occupations; it is important to see the child from the point of view of his possessing a unique set of qualities, important for success in this or that sphere;

- reformulation of the aims of education, when in the foreground there should be

the task of person's development on the basis of individualization of training;

- the changes of training methods which should assist revealing and formation of the pupils' competences depending on their personal inclinations and interests;

- sharp refusal of traditional procedures of the pupils' testing and assessment of the educational programs [5].

The named problems within the question of correlation between knowledge and competence approaches appear directly interconnected with professional and personal (including value) self-determination of the subjects of the educational process.

References:

1. Andreev A.L. Competence paradigm in Education: experience of philosophical-methodological analysis // *Pedagogica*. - 2005. - № 4.
2. Zimnyaya I.A. Core competences- new paradigm of result in education. // *Higher education today*. - 2003. - N 5. - p.34-42.
3. Zimnyaya I.A, Alekseeva O.F., Knyazev A.M., Krivchenko T.A., Lapteva M.D., Morozova N.A. Reflection of content of social core competences in the texts of State Standards for Higher education (theoretical-empirical analysis) problems of Education quality: Vol. 2. Social core competences of a student. - Moscow.; Ufa, 2004.
4. Komensky J.A. Selected pedagogical essays. - Moscow, 1982.
5. Raven J. Pedagogical testing: problems, errors, perspectives. - Moscow, 1999.
6. Titov E.V. Formation of high school students' readiness for research in Ecology // *Pedagogics*. - 2003. - N 9. - p.39-45.
7. Chutorskoy A.V. Core competences as a constituent of personality oriented paradigm in education. // *Student of an improving school: Collected scientific proceedings / Edited by Yu.I. Dik, A. V. Chutorskoy*. - Moscow, 2002.
8. Tchistyakova S.N., Zhurkina A.Ya. Criteria and factors of readiness of students for vocational self-identification: Teachers' manual. - Moscow, 1997.

Short Reports**SOME PROBLEMS OF INTERCULTURAL EDUCATION**

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Different intercultural contacts are widely distributed in the modern world. That is why the faculties have to cultivate tolerance in their students. All students must have a good will for understanding persons of different confessions, races, nations, ages, sexuality and professions. How to do it? The most part of stresses and conflicts is created as a result of discrepancies in surrounding environment. There are two typical mistakes we meet at the discussion of intercultural problems. The first one is connected with assumption that it is possible to destroy all discrepancies in the world and to build non-conflict situation on this base. The second one is assumption it is necessary to study the leading conflicts only. The national and language contradictions are studied in the first order in this case. Yet the most part of other problems is usually not in the area of study. These problems can create serious stresses in real life. It is impossible to create full homogeneity in external environment. Continues struggle between tendency to homogeneity and opposite tendency to stratification takes place in the each part of our world. Have we produce homogeneity on the one level of the human society the new stratification with its own contradictions immediately is created in its other part. That means we are living in a highly diversity world. This situation is not accidental. So we have to study the life in a very complex and diverse environment.

We have to take in account that the edge of 21-th century is the time which is connected with global revolution in the social life. This revolution Alwin Toffler called "The third wave" [1]. Globalization, Information Processes and Intercultural communication are results of this revolution. Its content is connected with creating of new fields of human interests. We can see serious changes in politics as a result of this changes affecting on the social life. These changes are caused by destroying of old patterns of social life. New patterns are created in it. It is this, which explains why multicultural structure of the world became very unstable and complex last years. That is why we can say all surrounded environment is built from the patterns of some manifolds. There are many stresses and conflicts created between the new and old patterns of society. That explains why the study of different diversities must be the starting point in the field of producing educational strategies. There is impossible to eliminate conflict situations as in educational period so in the period of post educational life without the study of the origin of these conflicts creating.

It is evident that the main laws of manifolds theory [2] are correct in the education area too. There are some conclusions in this theory which are the base for the study of education processes in the multicultural world. The first one is that diversities are inalienable part of surrounded world. Have we observe uniformly part of Nature we can be sure that in a very short time the opposite process of stratification will begin and the new diversity will be created. There are different parts or subjects in each manifold. Some of them are highly developed, but at the same time the other part of subjects is only weak developed. All subjects of any manifold create different clusters and patterns. The most advanced clusters consist usually of few subjects only. Yet these subjects are frequently the leading ones. Interface between two clusters is the zone of maximal stress, which creates new subjects of manifold. The new manifolds are also born in the contact zone of different clusters. Yet at the same time the contact zone is the field of maximal exiting and stresses. The structure of each diversity has not only typical hierarchic structure consisted of some levels. There are some connections in the plane part of each level of manifold. So we can say the manifolds have so-called net structure. We can usually observe that there is the main level of net structure which produces any stress. If we suppress this stress the new stresses are created on the lower level. These stresses frequently may be stronger than the starting one. That is why the searching of the optimal level of stresses and conflicts is the serious part of each educational strategy.

We can make some conclusions from these enumerated properties of manifolds. The first and may be the most significant conclusion is that there is no sense to try to avoid different groups of individual interests in the process of education. Had we find any conditions for suppressing any dissimilarity in our environment so the new one will be origin. Had we suppress several sources of conflict soon the new sources would be produced. So all educated persons will live in multi properties structures. Multicultural situation can exist in each group of students and teachers staff too. So the main goal of education is not to make attempts to suppress manifolds. In opposite each teacher must understand it is necessary to tune his or her students to live, educate and work in the very diversity and complex environment. So we have to teach students adapt its conduct to multicultural world. That means each person after education must be enough tolerant to different properties of its contact persons, must understand the necessity of diversification of customs, confessions, knowledge level, educational background and possible different properties of other persons. The teachers must not only understand this situation. They must know how to slice possible contradictions to the optimal level. They also have to cre-

ate such individual student's skills which can permit to transform all frictions and stresses between different cultural classes of neighbors we meet in our life in the soft form. We mean the soft form of the stresses between the persons is connected with peaceful and benevolent competitions between the different individuals. In opposite of this the hard form of stresses is connected with quarrel, struggle and other properties of intolerance.

It is necessary to have some practical programs to develop these ideas. These programs, first of all, have to be connected with training of teachers. This training must be accomplished with social testing of students and appropriate checking procedures. We also are demanded to find some special forms of educational process. As we shall speak about students' education we must start from suggestion that it is not effective and non-realistic to give special lectures about tolerance, different habits of nations, races and so on. Such lectures are useful certainly. Yet they can not solve the main problem of tolerant education. The student's tolerance may be cultivated as a result of everyday hidden work of all teachers' staff only. There are some methods of such education of course. Let us discuss the simplest example. There are many foreign students, which are educated in the most part of European universities. There are some objective obstacles, which usually meet these students in its everyday life. These obstacles include language barriers, differences in previous school teaching and other evident factors. Foreign students are usually dissolved in the host ones stuff. Yet in some cases isolated groups of such students are created. Saint-Petersburg Universities have a big experience in creating isolated groups of Arabian students. We can also compare situation in these groups with situation in groups of other foreign students, which were dissolved in the host students groups. We shall not discuss pure teaching problems here. Nevertheless we can say the foreign students separated in their main part of the host students have some additional problems in understanding habits of host nation, have additional internal conflicts and some other problems. We can confirm this conclusion by discussing of results of Interviews given us by the students. The host students in this situation also have not enough information about-foreign ones. That is why it is necessary to find optimal strategy of dissolving foreign students in the host stuff. It is also necessary to find additional forms of contacts between host and foreign students in the period of their free time. Correct organization of such contacts is one of the effective ways of overcoming intercultural barriers and creating more tolerant line of students' conduct.

Russia is the State with different national and confessional groups of its inhabitants. So all problems which are known when we work with foreign students are also known from the problems existing in Russian internal life. It is possible to say the spending of free time and the difference in wealthy level of students

and their motivation to study is usually the base of some problems of intercultural students' contacts. These problems are not so simple detected as language barriers for instance. Yet the stresses caused by them are very serious indeed. So it is possible to say the knowledge of the host language is not enough for peaceful contacts between students of different cultural groups. The sources of observed discrepancies may be created by difference in motivation of interest to teaching process, difference in habits, cultural and literacy foundation between different students groups. If the teachers do not pay attention to these problems such discrepancies can provoke some undesirable conflicts.

One of additional organizing form of diminishing possible students' aggressive acts is connected with searching of different forms of peaceful competitions. Different mathematical, cultural, sporting competitions taken under inconspicuous observation of experienced teachers permit to diminish stresses and to direct new stresses on peaceable way. The main idea of such competitions is not to create elite from the top students. The goal of such competitions is not to find several winners. In opposite this goal is to engage in these competitions as many students as it is possible and to give many awards to the large part of participants. New contacts and peaceful situation give in such strategies positive results in the fields of new contacts between different students belonging to the different cultural groups. Compulsory part of such strategy is continuously observation of students' properties. There is dangerous that without teachers control such competitions can transform in aggressive form. Conflicts in the football fans society is an excellent example of similar situation. One of the ways of preventing of transforming peaceful competitions in aggressive form is periodical changing of competitions' content and proclaiming new form of competitions. It permits to prevent creating of stable aggressive students' teams by our opinion. The goal of educational strategy is not to make attempts to avoid difference of contradictions but to create normal spirit of them. The students have to be explained contradictions are constant part of our common life. They must understand that different human properties, confessional differences, race and national habits are the base of society wealthy. That is why the students have to check their strategy in everyday contacts as in the private, so in the communal life.

It is necessary to repeat all these education strategies have to realize in the hidden processes. Understanding the fact that hidden processes are cultivated many scientifically skills and abilities is the novelty of last years [3]. Yet the hidden processes are responsible for cultivation social properties of individual. That is why all hidden processes must be under teachers' control. There are some special receptions which permit the teachers to examine the hidden processes. These receptions are different for different

situations and different teaching subjects. It is possible for instance to invite students in their common Interviews to describe their impressions from contacts with the students of different countries, sexuality, age and confession [4]. It is also well known that educational process is depended from external information which came to the students from TV programs, books and personal contacts. So continues study of students' interests is important part of education strategies connecting with creating of students' tolerance. The study of students' library cards is one of the methods which give information about their interests. Different Interviews permits also the teachers to know which journals and TV broadcasts are in the field of students' interests [4]. Each teacher must have some new interesting examples for explaining the importance of understanding one another. For instance it is possible to use the story narrated by Russian champion Igor' Ter-Ovanesyan. He narrated how American champion Bob Bimon at the Olympic Games could not understand he have running jump with world record result. The source of this misunderstanding was caused by very simple reason. Bimon could not understand what did it mean meters and centimeters in his result. He could not imagine that the most part of world media and sportsmen do not use foots. Explanation of this simple example permits the teacher to pay student's attention on the validity of intercultural contacts in the neutral field of the world sport competitions.

There are some subjects in the universities which can help the students to understand situation in different countries and other parts of the society. Ecological training exercises involve description of the real situation in different countries in the teaching process. For example, if the students discuss with their teachers ecological situation in the Baltic Sea region they must understand that some countries: Russia, Finland, Sweden and some others are closely connected together. If the teachers appropriately include such examples they direct the students' attention to surrounded people and create some tolerant habits as a result. At the period of ecological studies the students have to understand the contributions and needs which have different human communities, countries and so on. Such studies are useful for cultivating students' understanding of intercultural interests.

There are some other subjects interesting in this field too. The teachers staff must be invited to search such subjects and to invite useful examples which can help the students better understand other countries. Many interesting moments may be used as starting point for discussion about differences in people habits. For instance: the decimal fractions in Russia are divided with the help of point and in UK and USA with the help of comma. This small difference permits the teacher to discuss some additional moments connected with habits of different nations. There are some other examples of such type. Discussions in this field at classes can help the students to

understand it is necessary to pay attention to national, race and historical special futures of different human communities.

All ideas mentioned above have to be under constant checking of special teacher's staff. This staff must have special training and special preliminary grounding certainly. Statistical studies, student's Interviews and other similar procedures have to accomplish teaching process all the educational period. Unfortunately this part of work is usually not in the best state indeed. Different countries have different problems and experience in this field. That is why comparative study of this work is the serious way for progress in the field of intercultural contacts. The teachers have to study different tools and other materials like PC training programs too. It is simple to detect that these tools may be "nonsymmetrical". So in Russia you can find a lot of training literature, special textbooks and special exercises which help the student to study translation from English into Russian. But the text-books of opposite direction: i.e. books which can help the students translate the texts from Russian into English are rare and it is hardly possible to find such materials in Russian universities. In other countries there are other problems of similar nature. Yet there is no doubt all these 'nonsymmetrical facts' have to be enumerated, studied and than all the gaps have to be filled.

Educational strategies of present time are more flexible than in former one. This flexibility must be connected with sensitivity of these strategies which permits to take in account individual properties of each student. PC-programs with different levels of difficulty described earlier permit to realize this idea [5]. So the flexibility of computer training programs permits the teacher to tune educational strategy to the situation of rapidly changing environment.

References

1. Toffler Al. Powershift: knowledge, wealth and violence at the edge of the 21-st century. N.Y-Toronto-L.- Sydney-Auckland. 1990, 586 pp.
2. Romanenko V. The Main Statements of the Diversities Theory. Si-Petersburg State University of Architecture and Civil Engineering press. 1997, 76 pp. (In Russian).
3. Romanenko V.N., Nikitina G.V. <http://www.emissia.spb.su/offline/a633.htm>
4. Abstracts of the 6-th International Conference on Experimental Learning. Tampere, Finland. 1998, 94 pp.
5. Nikitina G.V., Romanenko V.N. Cultivation of Creative Abilities in the Period of Professional Education St-Petersburg State University press, 1992, 168 pp. (In Russian)

STUDENTS' VALUE ORIENTATIONS TO CREATIVITY IN STATE AND NON-STATE HIGHER INSTITUTIONS

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The problem of values and value orientations is one of the key theoretical and practical problems in forming personality of a specialist. The socio-economic reforms in Russia have created a fundamentally new situation in the sphere of higher education, the peculiarity of which consists in radical change of students' spiritual make-up.

On the whole, the topicality of studying students' value orientations especially to creativity is undoubted because graduates will have to work in non-standard conditions of transition period economy.

In scientific literature references to the results of research of students' value orientations are fragmentary and superficial. The researchers point out that in contemporary students' value orientations there exist myths and ideological substitutes borrowed from mass media. Liberal-market values usually coexist with cult of violence and nationalism in the students' mind¹.

The unsettled state of the problem and the limited background and empirical base prevent from making a scientific breakthrough in its study. Nevertheless after the research we consider the conclusions about some tendencies of changing value orientations scientifically grounded. The opinion poll according to panel representative selection was held twice in Altai Economics and Law Institute (AELI) and Altai State Technical University (ASTU) in 2006 and 2007.

The students were asked to estimate in points 14 values part of which were indicators of creative potential of personality, another part indicated neutral values interpreted differently depending on other preferences and still one more part indicated the opposite of creativity. The importance of values was estimated by the respondents in points from 0 to 5.

The comparison of findings after two opinion polls shows that the dynamics in value orientations to creativity is not expressed considerably. What deserves attention is significance of "big money" which was far from being important in other investigations.

How does a wish to become rich correlate with the values of creativity? In our research the indicators of a person's creative orientation are such values as "Interesting and diverse job", "Life and work full of

risk and surprises", "To be the leader in everything", "Fame and reputation", "Freedom in taking decisions and activity", "Greatness of Russia".

On the whole, "Interesting and diverse job" evidently dominates. Its significance was especially high in all courses in the first opinion poll and remained prior in the structure of value orientations in the second stage. The high correlation coefficient between "big money" and "interesting and diverse job" fluctuates in Altai Economics and Law Institute in different courses from 0.6 to 0.79.

The rating of the value "Greatness of Russia" turned out to be rather important in our research. The first processing of questionnaires showed that the significance of this value for students of non-state higher institutions grows from junior courses to senior ones. The correlation analysis indicates a positive link among the values "Greatness of Russia", "Life and work full of risk and surprises" and "Fame and reputation".

Both stages of research indicate the fall of significance of the value "Greatness of Russia" for senior students of the state university.

The first analysis of the students' value orientations in a non-state higher institution cannot infer a definite conclusion about the development of creative potential of all the respondents. During the teaching-learning process a weak positive dynamics is characteristic of the value "Interesting and diverse job" which contradicts the requirements for stability, social harmony and security guarantees. One automatically makes a conclusion that there is no place for creativity in the present-day Russia; the question is how to survive. Such a conclusion is valid for students of both higher institutions. The only difference is in the fact that the students' interest in work in a non-state higher institution is determined by the aspiration for getting higher profits. And it is not surprising since they pay tuition fee.

For students of a non-state higher institution the significance of the value "Interesting and diverse job" almost does not change in junior and senior courses. Unlike the AELI students, the students of the state university demonstrate a drop in the significance of creative values by senior courses.

Summing up the study of students' value orientations in state and non-state institutions, we can make the following conclusions.

1. There are no essential distinctions in value orientations to creativity between students of state and non-state higher institutions.

2. The proportion of students who possess creative potential from the point of view of value orientation in all courses is relatively stable and does not exceed 30%. As for the rest of the students, their value orientations to creativity do not develop; there is a falling tendency by senior courses. It is especially noticeable after the analysis of the ASTU students' answers.

¹ Fisher M.I. Overcoming Uncertainty in Russian Education // *Pedagogics*. 1993. № 6. p.20; Lapin N.I. Values as Components of Sociocultural Evolution in Modern Russia // *Sociological Research*. 1994, № 5, pp 3-8; Gorshkov M.K. Russian Society in Transformation Conditions: Myths and Reality (Sociological Analysis) 1992-2000. M.: Rosspen, 2003. 246 p.

3. There exists a stable link between a complex of indicators of creative potential of a student's personality and value orientations to creativity.

4. The development of creative qualities and value orientations to creativity depends on the socio-

economic situation in Russia, social risks which inevitably raise the rank of such values as big money, private security and life without conflicts for all categories of students.

*Materials of Conferences***CONSTITUTIONAL-CONTINUAL
VARIABILITY OF PERSONALITY AS
PSYCHIC AND PSYCHOLOGICAL HEALTH
PROBLEM**

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A topical problem of present-day psychology and the allied disciplines is the study of constitutional-typological psychological, personal, characterological features of the human related to the norm diapason and his differential variations from the constitutional-typological abnormal variability (b.M. Teplov, B.G. Ananyev, V.M. Rusalov, B.F. Lomov). In connection with this the development of the changeability diapason of constitutional psycho-typological foundations of a personality, its variations and commonalities causes an impassioned debate in the modern psychological science.

The psychological and psychiatric practice, observations of leading scientists, a series of scientific research acknowledged that there are "passages" from constitutional manifestations within the norm to the variational personal-typological variability within the pathological constitution (P.B. Gannushkin, O.V. Kerbikov, G.K. Ushakov, E. Krechmer).

The constitutional-biological foundations of the personality should be considered that very inner factor, that very inner condition, without which the formation of the psychic process as the "living one" is impossible.

The problem of the personal variability continuum, following the sophisticated clinicians and scientists G.K. Ushakov and A.Ye. Lichko in 1988, was kept by a professional psychologists B.S. Bratus. The author considered the question about the psychological norm and pathology differentiation as the problem of abnormal development of the personality in the philosophical-ideological, general psychological and concrete-applied aspects, fairly raising the personal abnormality up to the level of the most important problem in the clinical psychology, investigating the inner mechanisms, due to which the deviations beyond the norm diapason are possible. It was evidently demonstrated that at the formation of personal abnormalities (by the example of epileptics and alcoholism patients) the same psychological mechanisms, general for both normal and abnormal mental life running, work.

The natural constitutional variability within the psychological and psychiatric norm framework distinguishing the utmost variants of norm-accentuations of the character was first demonstrated by A.Ye. Lichko. The clinical observations of A.Ye. Lichko allowed separating two degrees of accentuations, which clearly testify to the probable personal-typological constitutional variability. The absconded accentuation is an

utmost variant of the norm, while the apparent accentuation is beyond the norm as the very representatives of the evidently expressed accentuants are inclined to the demonstration of the abnormal personal-characterological response.

In scientific literature the questions of differential diagnostics of pathological and non-pathological deviations of a personality, a tendency to delimit clearly the ideas of psychopathies and accentuations are clearly traced back. The fact that in the case of non-pathological deviations a return to the behavioral norm occurs more often at the adequate psychological and psychotherapeutic aid, it emphasizing, hence, the possibility of pathogenic microsocioal conditions' compensations in the development of deviations in a personality relating to the psychological and psychic norm, comes into account. But if pathological personal deviations occur, then the formation of personality development as a marginal form of psychopathy can be marked more frequently (O.V. Kerbikov).

O.A. Akhverdova proved that there is a continuum of the abnormal personal variability. I.V. Boyev formulated the concept of marginal abnormal personality (MAP), having separated a statistically probabilistic diapason being located between the psychological norm – accentuated personalities (the diapason of marginal variants of the psychological and psychic norm), and different degrees of manifestation with pathological psychic constitutions (psychopathy diapason). From the authors' point of view, the diapason of marginal abnormal personality is a binding intermediate continual link between the psychological, psychic norm and pathological personal constitution (psychopathy). The probabilistic diapason of the abnormal personal variability is represented by the marginal abnormal personality characteristics to the fullest extent.

In the constitutional-continual space the abnormal personality variability is registered and objectivized in the examined by psychological, Psychophysiological, anthropometrical and clinical methods. The psychic health and psychological harmony as part of the norm is provided and supported by an adequate interrelation and interaction of the personality, constitution and external medium (spiritual, social and ecological). At the marginal abnormal personality level this interrelation is manifested in the form of morphogenotypic disharmonic variability from ill-defined deviations to serious abnormalities, both in behavioral stereotypes and the entire psychic, personal functioning, adding an inimitable singularity peculiar to a concrete personal psychotype or smoothing, impoverishing the personal profile (O.A. Akhverdova).

The concept of the abnormal personality variability of the organic origin of N.N. Voloskova allowed formulating that the constitutional-typological insufficiency of higher nervous activity and/or psy-

chotypological predisposition of the personality promote the formation of the aggregate of the psychotypological signs peculiar to the diapason of the abnormal personality variability of the organic origin within the structure of the constitutional-typological continuum. According to the research results of N.N. Voloskova the MAP representatives having the higher nervous activity and personality constitutional-typological insufficiency signs aggregate are estimated as the MAP representatives of organic nature. In this case the MAP represents a "pathologically modified soil", which is the basis for the xenogenetic-organic brain insufficiency being formed under the influence of unfavorable external factors of the habitat. The actualization of pathobiological mechanisms underlying the xenogenetic-organic origin MAP results in the appearing of marginal neuropsychic, somatopsychic, personal and behavioral disorders conditioning the xenogenesis of non-psychotic disorders of infancy and growing age.

Thus, the variability of personal, characterological, psychological and psychic properties from the mid-line of the psychological teen-age norm to extreme variants of the personal-characterological norm (accentuations) of teenagers, further to the marginal abnormal personality diapason and only then to pathological constitutional personal structures in the form of psychopathy lies at the heart of the personal-characterological constitutional continuum of teenagers.

References

1. Alexandrovsky Yu.A. Marginal psychiatry and modern social problems – M., 1996.
2. Ananyev B.G. Human being as an object to study – L., 1969.
3. Akhverdova O.A. Experimental-psychological diagnostics of personal-characterological continuum of teenagers // Monograph – M., 1998.
4. Boyev I.V. Marginal abnormal personality – Stavropol, 1999.
5. Bratus B.S. Personal abnormalities – M., 1988.
6. Gannushkin P.B. Selected papers – M., 1964.
7. Kerbikov O.V., Felinskaya N.I. Psychopathy – Forensic psychiatry – M., 1965, Ch. 24, pp. 327-349.
8. Korolenko Ts.P. Human Psychophysiology in extreme conditions – L., 1978.
9. Lichko A.Ye. Psychopathies and accentuations of character in teenagers – L., 1983. Lomov B.F. Psychological science and social practice – M., 1982.
10. Rusalov V.M. Biological foundations of individual-psychological peculiarities – M., 1979.
11. Ushakov G.K. Marginal neuropsychic disorders – M., 1987.

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WAYS OF BOLOGNE AGREEMENTS PRINCIPLES REALIZATION IN RUSSIA (REPUBLIC TATARSTAN)

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In construction of the European higher education Zone the basic role is played by fundamental principles formulated in the university charter "Magna Charta Universitatum" accepted in Bologna in 1999.

Bologna process one of the most successful European projects. It is paid large attention all over the world and it becomes some kind of Europe's "logo". Bologna reforms raise attractiveness of the European higher education system since they are based on the certain philosophy and methodology and also on the open and transparent tools such as the European system of translated test units usage. These principles are characterized by effective applicability at the international level as they comprise common understanding of higher education as public property and academic values as the basis of higher education.

One of the Bologna process reforms aspects is to solve public problems put before educational institutions, but the dialogue with community is not supported at a sufficient level. Thus, in parallel with study of understanding and efficiency, increase of various tools usage governments should give to educational institutions a new pulse to the common reforming tasks decision, so that higher initiative of the students, professional training to the job market, mobility, appeal and social integration became the European space higher education integral elements forming.

For effective transition to training focused on the students, the additional efforts are required. Here enters not only encouragement of educational results usage and precise explanation to the students expected from them knowledge and skills but also stimulation of students' critical thinking and active participation. Special efforts are necessary for teaching staff's motivation and training for job focused on students. It is necessary to involve students and teachers into study of the given new approaches application consequences.

Kama state academy of physical culture, sport and tourism successfully practices Bologna process reforms. Our academy signed the contract with the Exeter University (Great Britain). Students and post-graduate students of our academy have one year training at the given University on a speciality "Physical culture and sports". The system of translated test units is a basis of the confidential relations among our educational institutions, cycles, subjects, supporting, thus, flexible and multilateral mobility being a key task of the Bologna process. Government of Republic Tatarstan provides students and post-graduate students of

our academy with the educational grants for training at foreign Universities in frameworks of the Bologna agreements under condition by last of the international examination "TOEFL" delivery. After finishing study abroad students and post-graduate students remain to work in the native academy according to the contract.

The principle of higher education and research activity connection assumes education of all levels based on scientific researches is one of the strongest sides of Europe and European universities. Educational institutions offering education on the basis of scientific research provide integration and development of the research component on all cycles, allowing the post-graduate students and teachers to get experience of the scientific work.

Post-graduate students of the Kama state academy of physical culture, sport and tourism have master's program of training at the Exeter University (Great Britain) on a speciality "Adaptive physical culture". According to the Bologna agreements principles it is supposed to purchase a wide spectrum of transferred skill which should be provided not only at a doctor's level but also in the educational programs of all other levels that will allow to bring up a new generation of the leaders capable to multilateral thinking and responding on requirement of the quickly varying job market.

The principle of assistance to innovation potential development assumes that European universities will aspire more and more actively innovation potential strengthening by development connections with external partners, knowledge transfer professionalization processes in accordance with regional, national and European initiatives in the field of research politics. The tendency of groups creation on the incorporated scientific research directions by universities and their partners will receive the further development as one of the innovation process rod elements.

So between the Kama State academy of physical culture, sport and tourism and Brunel University (Great Britain) the long-term contract on realization of the joint international research project on the theme "Sports inheritance" is signed which should be finished to the World Students' Universal Games in 2013 in Kazan (Republic Tatarstan, Russia).

Thus, according to the Bologna agreements decisions not only Europe and our country but also all world becomes "A community of knowledge". In this connection the processes of the European space of higher education and European space of scientific researches creation and national governments' efforts will allow higher educational institutions to carry out the tasks, put before them, not only at adequate but also at an excellent qualitative level and to be competitive in relation to higher education system in other continents.

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NEURONETWORK TECHNOLOGIES AS A MEANS OF ORGANIZATION OF EDUCATIONAL PROCESS

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One of the main goals of educational process is ensuring proper quality of personnel training so that they can easily adapt to the demands of a new working environment that requires processing of large amounts of information. One of the ways to solve this task is incorporating integral programs according to specialization into the educational process. The purpose of the present work is improving professional skills of trained students by developing an efficient pattern of the educational process based on artificial neuronetworks (ANN) application to process information when studying disciplines that require solutions of unformalized tasks of prediction and classification.

Such programs have a final aim of learning in view, student's ability to solve problems in their profession. This can be achieved by the choice of appropriate courses and their logical succession. We presume ANN could serve as such a tool. ANN is an advancing class of intellectual systems aimed to employ qualified student's experience in the areas where solution quality traditionally depends on the quality of examination. We believe neuroinformation technologies (NIT) is the most appropriate system to widely implement both in the educational process and in scientific research. To support this view, the following reasons can be mentioned: 1) neuronetworks present an interest for an expert as they help to provide prediction and classification solutions in such areas as Medicine, Biology, Information, Advertising; 2) since it is not essential for a user to be a skilled programmer to solve problems, the number of users could be indefinitely large; 3) when using NIT, there are no mediators between the object and the user which prevents negative psychological factors that would otherwise hinder a wider use of information technologies; 4) NIT are noted for being universal as one and the same program provides opportunities for working in various spheres; 5) NIT do not require the information to be so detailed and formalized as in strict systems, which is particularly good for the initial stages or for exploratory analysis as well as for the educational process.

No matter how good content a teacher has - if this content is not presented in an easy and appealing way to the course participants, the course will fail. In the education based learning environment, student learning, becomes the main focus, not the content,

teacher or the technology used, which played only supportive roles. Students have displayed dynamism and extraordinary flexibility, self-confidence, demonstrated a team spirit, the feeling of being at ease in online community; they were proud to "have learnt much". It is expected that both technology and pedagogy will be supporting it - only under this condition a real knowledge can be gained and a high level of student satisfaction can be generated.

Modern education should be moving from the traditional recall of facts, principles, or correct procedures into the areas of creative thinking, problem solving, analysis and evaluation - these skills are very much needed in today's knowledge Medicine. This shift focus on learning has presented educators with serious challenges as well as opportunities in restructuring their curriculum to meet the rising demands of a knowledge based society. These ideas were put to practice at the Medical institute of the supreme sisterly education. As a result of this work, regulating documents, methodical basis for teaching a number of subjects using ANN technologies, and teaching manual information technologies in medicine have been developed.

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PRAGMATICALLY PROGRAM OF TEACHING OF THE WORLD

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The tempestuous condition of our society demonstrates that without this kind of emotional and spiritual knowledge, we may fail to resolve the daunting challenges of our times. The first step toward building a teaching peace curriculum program ought to begin with the pursuit of self-knowledge, for it is with the individual that all knowledge originates. Knowledge, however, is not merely the compilation of external facts and information, but a complex web of thoughts and emotions that transform information into understanding. Since peace involves the participation of everyone, harmonious existence requires substantial self-knowledge; not only in an individualistic and isolated manner, but in direct connection to the common reality shared by all.

Because of excessive emphasis on technological, scientific and pragmatic knowledge for economic functions, the educational system corrupts the development of the human individual, turning it into the development of the individual worker. Diligent self-

study (conjoining one's individual human characteristics with sociological factors) has been initiated and securely established by an educational program, the bridge from self-knowledge to social knowledge can be safely crossed. After understanding and accepting the ephemeral, vulnerable, painful, and challenging aspects of the human condition, such prevalent motives as individual selfishness and self-preservation have the potential to be transformed into enlightened self-interest, i.e. awareness for the need of brotherhood/sisterhood and peaceful cooperative effort. Perhaps the best approach for such an educational endeavor would include more emphasis on the humanities and the cosmological ideas.

The achievement of peace represents a humanizing process whereby individuals manage their violent tendencies. Peace educators use educational skills to teach about how to create peaceful conditions. In community settings peace educators impart the values of planetary stewardship, global citizenship, and human relations. Students also learn about peace strategies that may be used at both micro and macro levels to reduce suffering caused by a multitude of different forms of violence – wars, ethnic conflicts, structural domestic and civil violence, as well as environmental destruction. All these different forms of violence threaten human existence.

Peace education has both short and long term goals. Peace education tries to build peace into the minds of its students. Such efforts attempt to counteract violent images in popular culture and the bellicose behavior of politicians. Peace education has taken place informally throughout history as various cultures pass on to their progeny understandings about the ways of peace. Every major religion has a peace message. In the twentieth century formal peace education programs have been introduced into university and colleges. Peace education has taken different shapes as it has developed around the world. Educators concerned about ecological catastrophe have developed a type of peace education known as environmental education that explains the principles of living sustainable on this planet. By the beginning of the twenty-first century, educators concerned about civil and domestic forms of violence have developed a new form of peace education known as conflict resolution education. All these different forms of peace education have in common teaching and learning about the roots of violence and strategies for peace.

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USING OF NETWORK TECHNOLOGY AS A BASIS FOR FOREIGN STUDENTS GRAMMAR COMPETENCE FORMATION WHILE TRAINING THEM RUSSIAN AS A FOREIGN LANGUAGE BY MEANS OF THE MODULE APPROACH

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The 21st century is marked by a rapid development of new technologies which penetrate into all spheres of our life including education. The growing market of educational services and high requirements to their quality force us to new scientific researches. They are aimed at studying, creation and using new approaches and innovative technologies while training Russian on the whole and its Grammar aspect, in particular.

Being a material basis of a language, Grammar aspect has always been in the focus of teaching students any foreign language. Training foreign students Russian Grammar standards is one of the up-to-date problems in modern theory and practice of teaching Russian as a Foreign Language.

It should be noted that traditional methods and approaches are still predominant in the system of training foreign students the Russian Language but Informatics Technologies are not given much attention to.

One of the most prospective approaches in methods of training Russian Grammar standards may be called a Module Approach realized by means of Network Technologies.

The main characteristics of the Module Approach are as follows:

- 1) Division of the studying Grammar material into completed Sub modules for convenience;
- 2) Possibility of permanent improving of a Module without changing of its whole structure;
- 3) Individualization of the process of training within the Module due to the set of methodical instruments;
- 4) Independence of a cognitive activity of a student;
- 5) Achievement of the aim of training within the Module due to student's comprehension of a practical importance and prospective of his/her activity.

Using of Network Technology as a basis for a foreign students grammar competence formation while training them Russian as a Foreign Language by means of the Module Approach promotes convenient interaction between a student and a tutor; creates conditions for interactive education and automatic estimation of results so that the process of studying becomes more qualitative and enthusiastic.

While making the experiment with foreign students we could research the Module Approach to

training those Russian Grammar standards in Integrated Educational Environment which is based on Program Cover named "PEGAS". As a result we could come to the following conclusions.

1. The Module Approach to step-by-step training foreign students to Russian Grammar standards by means of Network Technology is grounded for the first time in Methods of Teaching Russian as a Foreign Language providing for the completeness and non-stop character of the training process; check up of knowledge mastering and their cognitive activity.

2. It is well developed the procedure of creation of lingua-methodical interactive model of training foreign students Russian Grammar standards by means of Network Technology. The elaborated model is inculcated in the educational process.

3. These are found and practically realized some methodical ways which develop student's independence in improving his/her skills and habits in Russian speech. The methodical way of imitated educational dialogue between a student and a tutor is recognized as the main one.

4. On the basis of abovementioned data it is elaborated and checked up the model of how to manage the independent cognitive student's activity in the training process by means of Network Technology.

5. The process of training Russian Grammar standards within the Modules is organized on the three main principles: individualization, differentiation, interaction. The students firstly interpret the studying Grammar material and then systematize it independently while solving communicative and mental tasks.

To sum up, the elaborated lingua-methodical interactive model of training foreign students Russian Grammar standards is intended for independent foreign language learning. Every module has three blocks – theoretical, training and checking up blocks and different interactive elements – Activity book, Recourses, Tests, Glossary and Questionnaire.

The main results of the given research are inculcated as in Belgorod Higher Educational Establishments and abroad.

The materials of the present research may be used in the process of creation of electronic student's books, teaching and methodical complexes in Russian for the foreign students. It may be also used for the purpose of working out lecture courses in computing linguadidactic and then using the materials for those improving their qualification in Methods of Teaching Russian as a Foreign Language.

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INTRODUCTION OF CONTINUING EDUCATION IN RUSSIA

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1. Introduction

Diversity of social, national, cultural, economical conditions where the modern Russian educational system functionates and develops defines the urgency of continuous vocational technical education. The arrangement of conditions for continuous education requires solving a number of tasks. The most important ones are to ensure education availability and to inspire everybody to continue his/her learning throughout the whole life.

In the Russian higher education system there is a sufficient operational experience of such arrangement of conditions. The work on different aspects of the correspondence universities interactions are done in the majority of primary and secondary vocational institutions. The analysis of functioning some of them has permitted to specify some particularities and common problems of developing continuous educational models.

2. Main continuous educational models

It is possible to single out several types of such models:

1. The model of ensuring succession of state educational standards in a college and a university. The development of connected curriculums and programs on their base allows the graduate to get higher education in a short space of time. This model works only at the co-ordination condition of high school and college schedules and study programs.
2. The model of college entering into the university structure with the college legal status loss.
3. The study model of after college in the form of externship.
4. The study model of getting higher education by means of distance learning technology.
5. The model of opening the branch of the university on the college base therefore the college graduates have a possibility to graduate in their regions.
6. The study college model for an additional year provided by the forces of university teaching staff with getting bachelor's degree of the university.

Disadvantages of developed models:

- The students with college education are admitted (or are transferred after the enrolment) on 3rd year of university studying as a result they do not get sufficient general scientific training which other high school students have got during the first two years;
- There is a mechanical transfer of university disciplines into college educational programs that leads to repetition and duplication of studying materials in some compulsory and special disciplines;
- There are mechanical «repasses» in university subjects matter with the same name and with an

equal amount of hours therefore students do not get the professional training necessary for the university graduates;

- In the co-ordinated curricula of college and university levels there are retreats from the standard both these levels: the part of high school subject matters is transferred into the college curriculum owing to what the specialists training of average professional level gains university fundamental nature but at the same time it is characterized by decreasing the professional-practical training level;

- In universities there is a trend of decreasing the fundamentality level, the relation of theoretical and practical, general scientific, general professional and the special training matching to professional tasks of each educational step, etc.

3. Omsk state technical university practice

There is an interesting experience of university complexes where the continuous education system is completed at the following levels: the profile education in the system «school - college - university - additional vocational training». Mechanisms of ensuring succession result in developing the students' requirements and abilities to work independently from step to step and using the main university's forms of educational process organization in educational process.

The Omsk state technical university (OSTU) does specific steps in this direction. The corporate university technical complex includes the University College. One of college tasks is to develop the professional educational programs contents for the continuous engineering education using a regional component of the state educational standards within the limits of the educational complex "college-university".

The theoretical base of such interaction is the continuous education concept that defines structure, contents and organizational forms of each interactive educational institutions activity. The integration model ensuring organizational and substantial succession, unity and interconnection of college and university levels will be developed according to the example of one of the majors during the experiment. At its further development it will promote to satisfy actual and perspective needs of the Omsk region in professional and cultural growth of engineering specialists, to form favorable conditions for self-education and their continuous professional development.

The initial stage of cooperation between the college and the university is to develop conjugated curriculum. In order to set continuity it is necessary to consider similarity and difference of college and university levels according to the following parameters:

- professional tasks to solve which the specialist is trained;
- the ratio of theoretical and practical training;
- the ratio of general scientific, compulsory and special training within the limits of the theoretical;
- the forms of educational process organization.

When designing the conjugating professional educational programs it is necessary to displace accents from the education contents as the purpose to education as a resource of the person development, from a transmission mode of the ready standard-methodical knowledge sum to forming readiness for independent creative educational activity.

Main principles of designing the conjugating curricula are:

- the principle of education completeness at each step;
- the principle of the contents education succession assuming the extension and the intensification of the knowledge and abilities obtained at the previous university step and their further development taking into account demands to the universities graduates level and support of their readiness for realizing other professional functions according to qualification features.

In order to implement a part of university educational programs in college on the base of non-mechanical uniting but integration it is necessary to study the educational contents deeply and structurize it in other way and to enhance the college teaching staff qualification substantially or engage in the qualified university teaching staff to the college educational process.

The increase of students' self-study, especially, on compulsory and special disciplines should be provided for in the conjugating curriculum.

The time increase for the students' educational research work influencing the shaping of higher level professional thinking significantly is being planned.

4. Conclusions

Thus, the form of interacting of two educational institutions with the purposes of designing the integrated professional educational program for specialists of engineering profile:

- will design the adequate form of enlarging a mental potential of educational regional space in accordance with the present stage of scientific and technical advance;
- will allow forming the unified, successive informational-educational environment integrating informational and technological operational resource of various educational steps;
- will develop the conditions for organizing the united scientific-educational centers, laboratories on developing and issuing successive (interconnected, integrated, etc.) programs and educational disciplines complexes for professional training;
- will make possible to solve the problem of quality engineers training management in the region.

Developing new relations between educational institutions of college and university levels will permit to organize the professional training process at a qualitatively higher level and combined with universities to introduce the qualitative training practice of bachelors

and engineers in the shortest periods on the conjugating curricula base.

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EDUCATION QUALITY PROVISION

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Joining of Russia to the Bologna Process on Higher Education obliges Russian institutes of higher education to follow the Sorbonne Declaration policy for reaching the targets in the nearest future which conduce creation of the unified European zone of higher education and expansion of the European system of higher education throughout the world.

Main targets:

- acceptance of the system of academic degrees which is easy to understand and correlate for providing an employing possibility of European citizens and rise of competitive recovery of the European system of higher education;
- acceptance of a two-level educational system;
- implementation of a credit system according to the ECT S type, the European system of recrediting of the credit labour hours as a suitable method of supporting a large-scale student mobility;
- assistance to the European cooperation in the sphere of quality of education with the purpose of elaborating of the equitable criteria and methodologies;
- assistance to the necessary European views on the higher education, particularly concerning the curricula modernization, interinstitute cooperation, mobility schemes, joint training programs, practical training and carrying out scientific researches;

As many Russian institutes of higher education our university works on each of these courses. Thus in 2007 we started to work at educational process organization using the system of credit units at one of the SUSU Faculty. We elaborated the Regulation on organization of the educational process concerning transition to the education using a credit-module system and a score-rating marking of studying results, Regulation on score-rating system of studying results marking, Regulation on students self-studying, curricula with credit units, approximate work programmes of the classroom disciplines.

The main issue of the international and Russian forums and conferences is the problem of the educational quality and its provision. The SUSU also performs work in this direction. Provision of quality is the part of the quality management system that is the system of the university quality management which

provides all interested parties the guarantee of quality education. The SUSU direction made a decision concerning elaboration and implementation of the system. Model of the university quality management system and educational process is carried out according to the requirements of the international standards ISO series 9000 which are adopted to the educational activity.

Complex structure of the university, presence of faculties and branches (36 faculties both technical and humanitarian, 13 branches) which has a fixed organizational and financial independence led to necessity of formation of two-level quality management system (then QMS).

The first level is the university QMS, its functioning is aimed to organization, monitoring, change, analysis and improvement of the educational activity of its departments. Direction of the university chose a quality policy, which is the unified course in the sphere of quality for the whole university campus. Complete description of the university quality management system, organizational arrangement, actions carried out at the university, cooperation and criteria of estimation of their effectiveness are in the quality Manual. For performing the work in a proper way the university has a set of standards and documented QMS procedures. The elaborated documentation is unified for all levels and is meant for realization and improvement of the departments' activity which belong to the structure of the general educational process management.

The second level is the departments' quality management systems (faculties, branches). Their aim is connected with the immediate realization and improvement of the educational processes.

One of the most important quality management instruments is estimation and analysis of the performing activity. Thus the level of the educational process at the university is estimated according to two complementary directions.

The first direction is connected with the analysis of quality management system functioning of the university departments (faculties, branches). Analysis of the university QMS is carried out by the Educational Quality Management Department (QMS of the 1 level) during the internal audit. Faculty Quality commissions analyze functioning of their QMS independently by means of the internal audit within their departments.

In accordance with the curriculum worked out for a year the Quality Department audits the faculties and branches which are internal for the university departments and external for these departments.

For carrying out this activity we established an auditor group including representatives of the Quality Department, Education and Methodic Department, Record Keeping Department. The Quality Department and the University Pro-Rector on Educational Affairs curate the auditor group activity. From the audit results we determine the typical discrepancies and uni-

form corrective actions; the material is given to the university administration for analysis. The general results are discussed during the Academic Council conference where the decisions on improvement of the quality of education and educational activities are taken.

Internal audit of the university departments is carried out in accordance with the internal audit plan. The plan should contain information about the auditing department, auditing area, audit objective, audit period, regulatory system, members of the auditor group, audited entity. The auditing group examines activity of the faculties and Dean's offices and departments corresponding to them in the educational and pedagogic spheres in accordance with the QMS elements on the State Standards of Russia, International Organization for Standardization 9001-2001 (ГОСТ Р ИСО 9001-2001). For example, Paragraph 4.2 "Requirements for Documentation", Paragraph 5 "Administration Responsibility (activity planning, determination of responsibility and delegation of authority, internal information interchange, analysis on the part of the administration)"; Paragraph 6 "Resources Supplement (regular personnel and its teaching, infrastructure, working space)"; Paragraph 7 "Stages of the Educational Process (admissions office, educational process planning, educational and pedagogical process, employment assistance, communication with the employers)"; Paragraph 8 "Measuring, Analysis and Improvement (analysis of all actions, organization of work with weak students, measures for corrective and preventive actions, improvement of the activity)".

Discrepancies are determined on the grounds of the interlocutions and examination of the documents. Each discrepancy is put on a separate piece of paper where faculty or department representatives (to which the discrepancy refers) write the corrective actions and terms of their fulfillment. Further the corrective actions result evaluation is put on the same piece of paper when next audit takes place.

A generalized report on audit is drawn at the end of the academic year. The university typical discrepancies and common corrective actions are put and the ways for improving the educational activities are offered.

The second direction is connected with current (during a semester) analysis and interim (at the end of semester) analysis of the students qualification which are carried out by means of the elaborated and adopted information system "UNIVERis".

The representatives of the university branches and Dean's offices enter source information into the system database. They put surname of every student of a group, his current studying results and interim rating. The database information is processed by the calculating system and shown in tabular and diagram forms which enable to estimate the level of knowledge and skills at the faculties on the whole, on disciplines, of groups and individually (if necessary). The ob-

tained information enables to determine the discrepancies, plan ways for their removal and for the process improving.

Analysis of the results of the current control of the studying results, interim rating is carried out by the Dean's offices with the assistance of faculty departments. The determined discrepancies are discussed on departments' meetings during which the ways of the discrepancies' removal are planned and approaches to the process improvement are offered. The interim rating results are discussed on the faculty and branches councils during which the discrepancies' causes are examined, the offered ways of their removal and educational process improvement are considered. Reports about the accepted and performing decisions are given to the Educational Quality Management Department which analyzes the faculties and branches results and gives the results in free-form report to the university rector for analysis. At the beginning of every semester the university Academic Council discusses the results of the students' knowledge estimation, work of the departments and teachers. It makes decisions concerning the activity improvement.

The Pro-Rector on Educational Affairs can enter the program and control the situation (studying results) of any speciality, discipline right up to certain groups and students; and on the basis of the Quality Department and faculties reports examine the offers concerning the discrepancies removal and improving of the educational process.

Thus the systematic conduct of the audits and carrying out the evaluation and analysis of the educational activities enable to judge fairly about the main directions of the educational process, determine discrepancies, offer ways of their removal and determine the ways of their improvement, that is to guarantee and refine quality of the education given at the South Ural State University.

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IDEALS OF ARTISTIC CULTURE IN THE SYSTEM OF THE HIGHER EDUCATION

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Introduction

The idea of reformations in higher education of modern Russia and introduction of innovational educational technologies still needs the profound methodological base. Nowadays the most valuable competences are the abilities for self-education, for self-modelling which help a person to find oneself easily in the space of multiple opportunities of profes-

sional realization. Among operations learnt during the educational period the key operations are those that model the world outlook of the human being and guide him to project his individual "world picture".

Methods

The main methods used in this research are general scientific methods of analogy, synthesis and extrapolation; the basic principles of G.W.F.Hegel's reflection theory and fundamental principles of the art theory by V.I.Zhukovsky.

Results and Discussion

The investigation of the notion "education" itself provides definition of major educational values. In Russian the etymological origin of the word "education" is "image-making" and "creating". That origin may be seen as a correct explanation of the essence of education as a cultural phenomena. Education is a reviving creation of the human being; the creation that liberates and makes visible the inner essence of a man. This inner essence may be understood as an ideal of a Human Being. Reviving impulse of education evokes operational activity of an individual. Educating a man means discovery of both himself and his capacities to realize the ideal action schemes. Education is a process of ideal-creating. Operations of ideal correlating between own subject quality of a man and a subject quality of the world are the main object of any educational situation.

In search of adequate technologies for solution of problems of world-outlook modeling in the higher education the new approach given in this research is based on the concept of education as a cultural vehicle.

"Culture" serves as a clarifying synonym of education in many languages. The main acting scheme realized by culture is involving a human being into a dialogue with himself and with the world. The mission of culture is Education and Creating of a Human Being.

Existing notional and functional correlations between culture and education give life to a hypothesis of the necessity to apply culture mechanisms to the system of educational institutes activities.

Owing to the active reflective quality of a psychological age of students, the higher education level becomes most attractive for using educational potential of artistic culture ideals, i.e. masterpieces of art. To organize a dialogue with art-works means to form a man's life position, to influence the formation of his/her world outlook.

In the process of applying mechanisms of artistic culture to the system of higher education the first task is to develop students' capacities of visual thinking. The second task is to master students' practice to cooperate and co-create in the coming-to-be process of artistic image development. Artistic image is formed in medium space of the dialogue-relationship between a viewer and an art-work. In comparison to other visual images artistic images, especially the one that was

born by relationship between a viewer and a real masterpiece, are characterized by incommensurably greater possibilities to represent a complete model of interrelation between a man and a Universe. This model is active and operational. To build up an artistic image during the dialogue-relationship with the artwork is a way to create a model of ideal spiritual activity of a human being in this world. The artistic image is an educational force, educational space and educational tool at one and the same time.

Conclusion

As a result it may be said that one of key problems of higher education in Russia today is lack of realization of a conceptual closeness between education and culture. Nowadays there are no existing technologies to adapt mechanisms of artistic culture to the sphere of higher education. At the same time a given research makes it possible to determine major directions where we can move to solve the named problems – to apply mechanisms of relations to the ideals of artistic culture to the sphere of higher education. The fundamental programme of introducing students to the space of art-communication via practice of visual thinking may become the main vehicle to create students' world outlook. This programme may become the basis of the whole educational process in higher

school. Notwithstanding the chosen specialization of a student (humanities, natural or technical sciences) the educational system that makes its goal to create an Educated and complete man who possesses multiple strategies of self-creating and self-modelling in this world, should use the educational potential of art.

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References

1. Hegel G.W.F. Encyclopedia of Philosophical Sciences. Vol. 1. The Science of Logics. (Moscow, Mysl, 1974).
2. Pivovarov D. The Problem of the Carrier of Ideal: Operational Aspect. (Sverdlovsk, Ural University Press, 1986).
3. Zhukovsky V., Pivovarov D. Intellectual Visualization of Essence. (Krasnoyarsk, Krasnoyarsk State University Press, 1999).

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Materials of Conferences

**BASIC IDEA, PURPOSE, PROBLEMS AND
NOVELTY OF NATURAL STONE
BRAKING-OUT TECHNOLOGIES USING
PLASTIC SUBSTANCES**

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It is known that the introduction of new approaches able to meet competition into the theory and development practice of mining solid minerals and also industrial and civil construction promotes their further development. In this connection the idea of creation of effective natural stone breaking-out and solid-cast stone building structures demolition technologies based on new principles of brittle materials destruction with plastic substances is progressive. Thereat, various purposes can be pursued; the main one is natural and artificial stone destruction process efficiency upgrading by means of breaking-out technologies using plastic substances in the mode of their impact displacement from shot holes into the cracks being formed.

In this connection it is necessary to solve the following main problems:

- to analyse the current methods, technologies and equipment serving to break-out block stone, and also to define their perspectives;
- to analyse the method of brittle materials directed destruction with plastic substances and define their perspectives in the area of natural stone destruction;
- to substantiate the parameters of block stone impact breaking-out technologies using plastic substances;
- to verify the parameters of block stone impact breaking-out technologies experimentally in laboratory conditions;
- to develop the block stone breaking-out technologies using plastic substances;
- to verify the block stone breaking-out technologies using plastic substances in conditions of mineral deposits open-cut mining method;
- to find extra areas of brittle materials destruction technologies effective application, using plastic substances;
- to develop and verify experimentally the brittle materials destruction technologies using plastic substances in extra areas of their effective application for the conditions of mining and building practice;
- to substantiate the block stone breaking-out technologies using plastic substances on the factors of environmental and labour safety for the mineral deposits open-cut mining method;

The conclusions about the following are ones of the first to be received in the course of theoretical research proved by the practice:

- the application area of the brittle materials directed destruction method using plastic substances in the mode of their impact displacement from shot holes into the cracks being formed at the block stone breaking-out is defined by the formations of any composition and properties, and the efficiency – by the parameters of hardware components and work performance technologies;

- the development of the crack being formed along the shot hole axis in the course of brittle materials impact destruction with plastic substances is connected with a gradual change of its form from an ellipse to a round, and across the shot hole axis it is of circular character and doesn't depend on its dimensions' further increase;

- the energy of a single impact of the instrument serving to form directed cracks using plastic substances in brittle materials should be minimal and not exceed 100 J on the condition that, taking into account the destructive agencies applied, its size is sufficient to begin the development and make these cracks of required dimensions;

- the influence of mining on the environmental and labour conditions at the block stone breaking-out decreases at the change of any well-known methods of its destruction to a mechanized variant of the brittle materials destruction method using plastic substances or other drilling-and-wedge ones.

The scientific novelty of these results consists in the following:

- it is proved that the crack being formed by discharging a plastic substance into it from the shot hole by a jib-stick develops symmetrically about its axis and, with the growth, tends to the form of a round, the center of which is shifted into the depth of the body destroyed;

- it is proved that the maximal pressure in the plastic substance at the moment of impact load application appears in the area of its contact with the jib-stick;

- it is proved that the maximal distance from the shot hole axis to the crack border and zone of its filling with a plastic substance corresponds to the jib-stick end location;

- it is proved that the dimensions of the crack being formed are defined by the amount of the displaced plastic substance, its flow properties, loading application character and physical parameters of the solid body destroyed;

- it is proved that in case of external loading application to a brittle material sample destroyed using plastic substances the preferential growth of the crack's dimensions and zone of its filling with the plastic substance will occur in the direction parallel to the direction of this loading application;

- it is proved experimentally that an approximate definition of the dimensions of the crack produced by the impact method using plastic substances

can be performed by the calculation based on the principles of quasi-static displacement of plastic substances from shot holes into the formed cracks on the condition of their spending small quantity and uniformity;

- the empirical dependence associating the instrument single impact energy and average volume of the plastic substance introduced to the formed crack at a single impact and rendering possible to define the brittle materials destruction process rate has been suggested and verified experimentally.

The practical value of the performed work carried out at the initial stage consists in the substantiation of the equipment and materials serving for rock failure using plastic substances by the method of their impact displacement from shot holes to the cracks being formed, and the development and implementation of appropriate technologies of work performance at a range of mining and construction enterprises.

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BASIC PRINCIPLES OF MINERAL DEPOSITS EXPLOITATION ENVIRONMENT AND LABOUR CONDITIONS IMPACT EVALUATION

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In is known that the mining practice impact on the surrounding grounds environment and human goes on simultaneously in several directions. It conditions the necessity of developing a methodological approach allowing carrying out an integral assessment of mining practice environment and working conditions impact. Due to the research carried out by us the general principles of such impact assessment have been developed, they being represented below.

The comparative evaluation of mining practice technologies' environmental impact is necessary to carry out in terms of emissions, toxic substances pumping, and also land resources (soils) outtake, mineral wealth disturbance and solid wastes formation ignoring the efficiency of potential means of collective protection.

The cap stone breaking-out technologies based on the application of plastic substances together with other drill-and-wedge methods are the safest ones,

when speaking on the environmental conditions impact.

To bring the compared mining operations into the matching appearance according to the environmental impact principle they are necessary to be considered in the light of: the same mining method application; the same natural media perceiving the influence of certain elemental composition contaminants being formed; the same aggregative state of the considered contaminants; the same target purpose of the considered mining processes conditioning the appearance and subsequent influence of the contaminants being formed.

The cap stone breaking-out technologies based on the application of plastic substances are connected with other methods of cap stone breaking-out by the only common process – drilling, that makes possible to compare them according to emissions of dust and vapors of oils used for the drilling technique work.

The comparative evaluation of mining technologies' influence on labour conditions needs to be carried out in terms of safety methods and industrial sanitation of the work performance ignoring the efficiency of potential means of collective protection.

The cap stone breaking-out technologies based on the application of plastic substances together with other drill-and-wedge methods are the safest ones, when speaking on the labour conditions impact.

As the only common process connecting the cap stone breaking-out technologies using plastic substances with other breaking-out methods is drilling, the comparison with them on the labour conditions impact should be carried out in terms of noise, vibration of the equipment applied, safe working methods, severity and intensity of work, as well.

At the comparative evaluation of mining technologies serving for cap stone breaking-out, the impacts associated with the contaminants, the concentration of which can be measured (calculated) with the help of their concentrations, should be referred to the environmental safety area, as their impact is beyond the scope of a spatial working place.

At the comparative evaluation of mining technologies serving for cap stone breaking-out, the impacts associated with the contaminants, the concentration of which can be measured (calculated) with the help of impact levels, should be referred to the work safety area, as their impact, in most cases, is not beyond the scope of a spatial working place.

For the purpose of bringing the comparison elements described with numeric values into the matching appearance they need to be reduced to the factors of time, finished commodity volumes or both time and volume of finished commodity.

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*Materials of Conference***STUDYING OF THE FEEDING RATION
INFLUENCE ON THE ACTIVITIES
OF MALE-RATS' SPERMATOGENESIS**

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Fall of reproductive health of population in Europe and Russia, in particular, makes investigations in studying causes and mechanisms of abnormal reproduction actual.

Incontestable is the fact that improper feeding, i.e. in case the main chemical elements (proteins, fat, mineral salt, vitamins) are unbalanced, there can be different disturbances of the function of the organism on the cellular-level. Actively fission cells, undoubtedly generative ones can be referred to them, are especially sensitive to negative influence.

That is why the goal of our experiment was to investigate the indexes of male-rats' spermatogenesis depending on their feeding ration.

Experiments were held on 40 white sexually matured out-bred male-rats weighing 180 - 200 g. Keeping the animals and holding experiments was based on the International convention of work with laboratory animals (Strasburg, 1986). Male-rats were divided into 2 groups (20 individuals in each). The first group got balanced feeding (mixed fodder + fresh vegetables, cottage cheese, seed oil). The second group got only refined grain. Both groups of animals were not limited in water. The experiment has been keeping on one cycle of spermatogenesis (60 days). At the end of the experiment testicles and epididymis were educed to make a morphological investigation

after death lethal injection of the animals (narcosis - ethereal). Homogenate was extracted from epididymises, spermiogramma was investigated. Testicles were subjected to histological process. Statistical processing was led in the program Statistica 6.0 (Statsoft, USA).

It was ascertained that in the second group of male-rats the general number of spermatozoa decreased by 14% while at the same time their pathological forms increased by 40% ($p < 0,05$) as compared with the animals of the first group. Other structural and functional indexes of spermiogramma in both groups of animals were practically identical and didn't overstep the limits of physiological standards.

Evaluation of the macroscopic structure of genital glands didn't discover important changes of their morphology, at the same time mass's coefficient of epididymises increased in the first group of the male-rats by 75% ($p < 0,05$) as to compare with the male-rats that were on a limited ration (group 2). Microscopical investigation of testicles' sections showed falling of indexes of spermatogenesis in the second group of the male-rats by 57% ($p < 0,05$) and growth of number of tubules with cast-off epithelium by 43% ($p < 0,05$) as to compare with the animals that were fed on a full balanced diet (group 1).

Thus, the results of the investigation testify to the disturbance of process of spermatogenesis of the animals that are on a monocomponent ration.

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