

ISSN 2311-8806

# Modern European Researches

Issue 1  
2014



Salzburg, Austria

## MODERN EUROPEAN RESEARCHES: ISSUE 1, 2014

JOURNAL “**MODERN EUROPEAN RESEARCHES**” IS THE PEER REVIEW JOURNAL, WHICH REFLECTS THE MOST OUTGOING SCIENTIFIC INVESTIGATIONS IN SUCH FIELDS OF KNOWLEDGE, AS PEDAGOGY, EDUCATION AND TRAINING, COMPREHENSIVE STUDY OF HUMAN, PSYCHOLOGY, SOCIAL PROBLEMS OF MEDICINE AND ECOLOGY; PHILOSOPHY, SOCIOLOGY, POLITICAL SCIENCE, JURISPRUDENCE, ECONOMICS; LANGUAGE AND LITERATURE STUDY, STUDY OF ART, STUDY OF CULTURE.

### FOUNDER AND PUBLISHER

PRIVATUNIVERSITÄT SCHLOSS SEEBURG, SALZBURG

### EDITORIAL BOARD

**P. Gorev – EDITOR-IN-CHIEF, PHD, ASSOCIATE PROFESSOR**

R. Gareev, PhD, Professor, full member of European Academy of Natural Sciences

M. Zinovkina, PhD, Professor, full member of Russian Academy of Professional Education, head of International scientific center of persistent creative education (Seoul-Moscow)

O. Korshunova, PhD, Professor

N. Kotryahov, PhD, Professor

G. Nekrasova, PhD, Professor

A. Nosov, PhD, Professor

M. Ulyanova, PhD, Professor, head scientific secretary of the department “Noosherical education”, Russian Academy of Natural Sciences

### EDITORIAL ADDRESS

SEEBURGSTRASSE 8,

5201 SEEKIRCHEN AM WALLERSEE,

SALZBURG, AUSTRIA

*PUBLISHER@DOAJ.NET*

### ISSN 2311-8806

Authors are responsible for accuracy of the information, contained in the articles.

Editorial opinion can differ from opinion of authors.

If reprinted, the reference to the journal is required.

© All Rights Reserved

Printed in Austria, 2014



## CONTENTS

Rating by economic regions in the Russian Federation by the level of production and consumption of dairy products ( <i>Olga Atamanova</i> ) _____	4
Role of Physical Training and Sports under conditions of the youth's health preservation and promotion, their social adaptation, personal and professional becoming ( <i>Michael Gnezdilov</i> ) ____	10
Some coeval information literacy standards in anthropology and sociology ( <i>Yuliy Stavropolsky</i> ) _	16
Innovative pedagogical management: essence, features and realization conditions in educational institution ( <i>Elena Tereshchenkova, Julia Golchenko</i> ) _____	20
Individualization of education for children with speech defects in preschool educational process ( <i>Svetlana Shatrova</i> ) _____	23
Interactive educative methods in institutions of higher education as pedagogical innovation ( <i>Marina Gulakova, Galina Kharchenko</i> ) _____	27
The estimation of the level of innovative regional system of Volga federal district: problems of realization and directions of improvement ( <i>Tatyana Shevchenko</i> ) _____	30
The development of graffiti cinematic dramaturgy ( <i>Elena Skorik, Alexander Skorik</i> ) _____	33
Attitude of industrial enterprises employees to innovations ( <i>Evgenia Zhelnina, Oleg Zhelnin</i> ) ____	36
Approaches to "youth" category definition ( <i>Vladimir Zagrebin</i> ) _____	39
Methodical approach to the estimation of efficiency of the use of energy supply in the trunk gas transport ( <i>Larisa Vazhenina</i> ) _____	44
The essential characteristic of the regional services market ( <i>Alexander Lunev, Natalia Pugacheva, Larisa Stukolova</i> ) _____	49
The sufficient condition for the solvability of the elementary zero-sum matrix games (nxn) ( <i>Oleg Koltunivskiyi</i> ) _____	52
Mathematical modeling in psychological researches ( <i>Aleksandra Zelko</i> ) _____	55
The procedure of land ownership protection ( <i>Elena Korolyuk</i> ) _____	58
The stages of working out the professionally oriented informational training of specialists ( <i>Galina Nekrasova</i> ) _____	61
The peculiarities of the phrase "Orange Revolution" in english sentences ( <i>Maria Budina</i> ) _____	64

**RATING BY ECONOMIC REGIONS  
IN THE RUSSIAN FEDERATION  
BY THE LEVEL OF PRODUCTION  
AND CONSUMPTION OF DAIRY PRODUCTS**

*ABSTRACT.* THE ARTICLE IS DEVOTED TO THE ISSUES OF PRODUCTION AND CONSUMPTION OF MILK AND DAIRY PRODUCTS, TAKING INTO CONSIDERATION REGIONAL PECULIARITIES OF THE FUNCTIONING OF THE FOOD INDUSTRY.

*KEYWORDS:* DAIRY INDUSTRY, THE RATING OF DAIRY PRODUCTION SPECIALIZATION LIVESTOCK, MILK CONSUMPTION ECONOMIC AREAS.

**OLGA ATAMANOVA**

CANDIDATE OF ECONOMIC SCIENCES, ASSOCIATE PROFESSOR, DEPARTMENT OF ECONOMICS, ORGANIZATION OF PRODUCTION MANAGEMENT, BRYANSK STATE TECHNICAL UNIVERSITY

Milk and dairy products in the Russian Federation is one of the most significant category of product industry. In the dairy industry of the Russian Federation as of 2012, there are about 1219 enterprises for the production of whole milk, sour-milk products, cheese, butter, ice-cream, canned milk, dried milk and other dairy products, whose share in the overall structure of the food supply reaches 12.4 percent.

Leading positions in the market of dairy products is occupied by such manufacturers as «Wimm-bill-Dann», «Unimilk», «Danone», «Ehrman» and «Voronezh Milk factory» («Молвест»). The dairy products market in our country has a high level of consolidation, as major players control more than 50% of the market. So the largest share of manufacturers of dairy products is the company «Wimm-bill-Dann», which is 35% of the market, «Unimilk» company is 15%. 15% on the market of raw milk in the aggregate belongs to such enterprises as «Danone» - 7%, «Ehrman» and «Voronezh Milk factory» («Молвест»), which is given by 4%, and the remaining 35% of the market is occupied with small regional processing plants.

Revenue from sales of dairy products has a tendency to increase and in 2012 it was 559,9 billion rubles. Should be noted, though, that the enterprises of the dairy industry are working profitably, the sector is characterised by a low level of profitability, which in 2012 amounted to 6.5%. The share of loss making organizations was 26.4%.

Currently, the domestic dairy industry was rather difficult situation. Because of the transition in the 1990s from the Central government to the market, type of managing this led to the fact that the agro-industrial complex of Russia was in a state of crisis.

This situation immediately reflected in a substantial reduction in agricultural production, acreage, the number of livestock of dairy cattle, which in turn contributed to the reduction in availability of raw material resources in the dairy industry of our country. It is worth noting that despite the decline in the number of cows in modern conditions there is a positive dynamics of increase of productivity of dairy cattle. Thus, during the study periods the level of yield of milk per cow increased by 38.3% and amounted in 2012 3776 kg against 2731 kg in 1990. This trend is because in the Soviet period the livestock of dairy herds even despite the low level of productivity was maintained at a high level in order to ensure the supply of meat, because in this period it was still and cold source of our state. Because of the liberalization of the economy the dairy industry (dairy sector) of our country became market-oriented, and the meat was of by-products of the dairy farms. Because of deliverance, dairy farms from the obligation to supply beef led to the fact that they were to increase milk production.

In our country, given its vast territory of the gross production of milk is distributed very unevenly, due to differences in geographical, socio-economic, environmental and other factors. Traditionally in Russia dairy cattle as a leading livestock industry developed in the Central European regions with the most favorable climatic conditions, with greater availability of pastures and meadows, with relatively high levels of income and population density. The livestock specialization in economic regions of the Russian Federation is presented in Fig. 1.

Based on the above presented information, it can be stated that orientation in animal husbandry is concentrated in the Central-Chernozem, West Siberia, North Caucasus, Ural, far Eastern economic areas and in the East-Siberian, Volga, Northern, North-Western and Volga-Vyatka regions takes place dairy and beef.



FIG. 1 THE LIVESTOCK SPECIALIZATION IN ECONOMIC REGIONS OF THE RUSSIAN FEDERATION

Milk production-raw materials economic regions of the Russian Federation is presented in table 1 on the basis of statistical data [Russian Regions. Socio-economic indicators, 2012].

On the basis of available information, we can conclude that during study periods gross production of milk in all economic regions of the Russian Federation tends to decrease. With the greatest numbers of manufacture of dairy raw material resources is observed in the North-Caucasus and Urals economic regions, which amounted to 82.9% and 74.9 percent respectively. In addition, the data presented in table 1, show that at the beginning of the study period leading positions in manufacture of dairy raw material resources occupied the Central areas of the European part of Russia, which belong exclusively to the dairy cattle breeding. However, at the end of the period the leadership in the production of milk-raw material is shifted to areas that have milk-meat direction, namely, the Urals, North Caucasus and West Siberian economic regions of our country, which in 2012 produced 5929,9 тыс. so, 5158,7 thousand tons and 4845,9 thousand tonnes of dairy raw material resources.

TABLE 1  
MILK PRODUCTION-RAW MATERIALS ECONOMIC REGIONS OF THE RUSSIAN FEDERATION,  
THOUSAND TONS

<i>Name of the economic region</i>	<i>1990 year</i>	<i>1995 year</i>	<i>2000 year</i>	<i>2007 year</i>	<i>2012 year</i>	<i>2012 year to 1990 year %</i>
Central areas of the European part of the Russian Federation	9791,6	6402,2	5164,1	4417,8	3955,8	41,5
Central Chernozem region	5265,6	3514,1	2629,3	2289,1	2499,4	47,5
West Siberian	7598,4	5365,8	4354,9	4270	4845,9	64,7
Ural	8099	6088	5337,4	5590,2	5929,9	74,9
North Caucasus	6222,8	4353,6	3736,7	4217,2	5158,7	82,9
Far Eastern	1690,1	900,9	748,4	682,4	768,9	45,5
East-Siberian	3252,6	2321,3	2020,8	1961,9	2145,5	65,9
Volga	6033,9	4697,3	3571,1	3588,1	4157,5	68,9
North	1887,4	1120,3	1012,6	923,4	885,2	46,9
North-West	1654,4	1145,2	966,8	780,7	757,7	45,8
Volgo-Vyatsky	4203,5	3291,3	2757,6	2479,3	2501,9	59,5

For a more detailed examination of this situation, the us was ranked by economic regions of Russia, reflecting factors such as milk production-raw materials, number of dairy cows, and milk yield per cow in farms of all categories as presented in table 2.

On the basis of the information presented in table 2, one can conclude that the Central areas of the European part of the Russian Federation, despite the fact that have specialization dairy cattle on all three factors are 5 place.

During the study regions with milk-meat direction, it was found that in this group are the Urals, North Caucasus and West Siberian economic regions, which was the greatest quantitatively milk-raw material, which is provided mainly by the greatest number of dairy cattle. The most effective production of dairy raw material resources is observed in the Central black earth economic region, which in the presence 899,8 thousand heads of dairy cattle produced 3955,8 thousand tons of dairy raw material resources that were achieved through a high level of productivity of dairy cattle.

Analyzing economic regions, with dairy and beef, it can be noted that these areas except in the far Eastern and Volga economic regions demonstrate a high milk yield per one shelter. So, in the Northern district of milk yield per cow is 4759,5 kg, resulting in the area of productivity of dairy herds takes the first place, Northwest, and Volga-Vyatka economic areas in this factor are 2 and 4 place and produce accordingly 4629,5 kg and 4489,7 kg However, since this is not favorable for dairy cattle climatic conditions in the above listed areas, the main focus is livestock dairy and beef. Based on the above, we can conclude that the most efficient production of milk-raw material developed in the Central Chernozem and Volga-Vyatka economic regions of the Russian Federation. This statement due to the fact that in the Central Chernozem and Volga-Vyatka regions, the number of dairy cattle as compared with the Central areas of the European part of the Russian Federation less than 1.7 and 1.5 times, respectively. However, the production of milk-raw data areas with fewer cows yield to the Central areas of the European part of Russia only by 39.6% and 36.1% respectively, which is associated with a relatively high level of productivity of dairy cattle, which the Central Chernozem and Volga-Vyatka economic areas occupy 3rd and 4th respectively.

TABLE 2  
RANKING OF REGIONS BY THE LEVEL OF MILK PRODUCTION-RAW MATERIALS,  
THE NUMBER OF COWS AND ROUTES PER DAIRY COW IN 2012

<i>Name of the economic region</i>	<i>The yield of cow, kg</i>	<i>Place in the region</i>	<i>Number cows thou heads</i>	<i>Place in the region</i>	<i>Production milk-raw materials, thousand tons</i>	<i>Place in the region</i>
Dairy cattle						
Central areas of the European part of the Russian Federation	4396,5	5	899,8	5	3955,8	5
Dairy- meat production						
Central Chernozem region	4578,5	3	545,9	8	2499,4	7
West Siberian	3167,7	7	1529,8	2	4845,9	3
Ural	4389,2	6	1299,8	4	5929,9	1
North Caucasus	3149,7	8	1637,8	1	5158,7	2
Far Eastern	3019,9	10	254,6	9	768,9	11
Meat- dairy and meat production						
East-Siberian	2519,7	11	852,5	6	2145,5	8
Volga	3028,5	9	1408,5	3	4157,5	4
North	4759,5	1	195,9	11	885,2	9
North-West	4629,5	2	245,5	10	757,7	10
Volgo-Vyatsky	4489,7	4	557,5	7	2501,9	6

It turns out that currently have a situation where the Central areas of the European part of the Russian Federation, which according to their specialization must have a sufficiently high indicators of productivity of dairy cattle, to hold leading positions on manufacture of dairy raw material



resources and, accordingly, must be a model for other economic regions of our country, are inferior in every way areas with milk-meat and dairy and beef.

An important feature of milk production in our country is that it is of a seasonal character. A seasonal peak in summer, and in autumn and winter periods milk production-raw materials is severely reduced. Seasonal fluctuations of production of dairy raw resources associated with the natural cycle of dairy cattle, as in the summer time the majority of the animals gives the offspring of that as a consequence accompanied by a growth in the ability to lactation and as a result of increased volumes of manufacture of milk, and also with lack of food resources in the winter.

Undoubtedly, the situation is currently in the agricultural sector, reflected on the volumes of production of milk and milk products milk processing enterprises. Production of milk and dairy products in natural terms on the main categories of goods are presented in table 10 on the basis of statistical data [Industry of Russia 2002, Russian Industry, 2010, Russian statistical Yearbook, 2012].

On the basis of available information, we can conclude that from 1995 to the year 2012 volumes of dairy production in the Russian Federation except for butter and SPVs and dry mixtures tend to increase.

So the production of whole-milk production in 2012 as compared with 1995 has increased in 2 times or by 5798 thousand tons in absolute terms.

In 2012 production of cheese all the enterprises of the dairy industry increased compared to 1995 in 2,1 times and has made in natural expression 464 thousand tons.

TABLE 3  
MANUFACTURE OF THE BASIC KINDS OF DAIRY PRODUCTS IN RUSSIAN FEDERATION,  
IN PHYSICAL TERMS BY MAJOR CATEGORIES OF GOODS

<i>Name of production</i>	<i>1995 year</i>	<i>2000 year</i>	<i>2005 year</i>	<i>2012 year</i>	<i>2012 year to 1995 year, %</i>
Whole milk products, thousand t	5600	6221	9742	11398	In 2 times
Butter, thousand t	421	267	254	222	52,7
Cheeses, thousand t	218	221	378	464	In 2,1 times
Canned milk, MUB.	527	623	897	789	In 1,5 times
Ice cream, thousand t	232	239	406	425	In 1,8 times
SPVs and dry mixtures, thousand t	125	74,5	79,7	48	38,4
COM, milk replacer, whey powder	95,7	96,7	123	112	115,8

It is worth noting that in the dairy sector one of the fastest growing and fast-growing market is the market of cheese. The most rapid pace of growth in production of processed cheese, which is, first of all, the deficit in Russia of high-quality raw materials milk, which is necessary for the formulation of European varieties of cheese. Manufacture of rennet cheese opposite tends to decrease, however, in spite of this they still occupy a leading position in the domestic cheese-making industry. So as of 2010 the share of rennet cheese amounted to 53% in the output of cheese and processed cheese – 47%.

Despite the fact that the production of canned milk in 2012 compared to 1995 increased by 1.5 times, and in real terms amounted to 789 million. in recent years has tended to decline. Production of canned milk by 2005 has increased in comparison with 1995 70.2%, however, in subsequent periods, volumes of development and has not exceeded this indicator, but, on the contrary, in 2012 in comparison with 2005 has decreased on 5,3%. According to experts, the main factor limiting production of canned milk is the loss of the culture of consumption of this type of dairy products.

Because in our country, a new generation of young people are not aware of such dairy products as canned condensed milk without sugar. The falsification of canned milk sent a mass phenomenon, and in modern conditions, consumers are becoming more demanding in choosing foods and dairy canned food, the quality of which has recently decreased significantly, bought less and less. Also the production of this product requires certain financial cost of the production of canned milk becomes every year more and less profitable.

Production of ice-cream in 2012 compared to 1995 increased 1.8 times. It is worth noting that the 2005 edition of this type of dairy products in Russia increased by 75% compared to 1995. However, over the last years, the production of ice cream tended to decline and only in 2012, the production of this product has increased in comparison with 2005 by 4.7% and reached 425тыс. tons. Skyrocketing demand can be regarded as the growth and restoration of the market after unsuccessful seasons 2006-2009 In previous years due to the increase in raw material producers

had to sharply raise the price of products, that in the conditions of *наловившегося* economic crisis has led to a reduction in sales.

The volume of production of butter in real terms in 2012 compared to 1995 decreased by 47,27%, due to growth of prices for dairy raw material resources, and with further increase of the prices for milk-raw material production of this type of dairy products will be annually reduced. In our country there is no a specialized manufacturer in the segment of butter, because this kind of product is produced mainly as a byproduct of the processing of milk into milk powder. Along with this, over the last years consumption of butter decreased in the result of the consumption of so-called «light» oils and Margarines. According to Rospotrebnadzor on the market of dairy products is present butter, produced with the use of herbal supplements, specific weight of which is from 20 to 40%.

In 2012, there was a significant reduction in the production of dry milk products. So, production of dry whole milk and dry mixtures decreased from 79,7 thousand tons in 2005 up to 48 thousand tons in 2012 or 61.6%. Manufacture of dry skim milk, whole milk substitutes and dried whey from 2005 to 2007 tended to increase, however, since 2008, the production of this category of goods decreased by 20.1% and in 2012 was the 113.6 thousand tons. Decrease in volumes of manufacture of dry milk products was caused primarily with the introduction of the concept of «milk drink» consumer demand, which is almost absent (loyalty on behalf of the consumers is very low), and insufficient production of dairy raw material resources. However, reducing the generation of skimmed milk powder is connected with decrease in the production of butter.

It is worth noting, despite the fact that recently the dairy industry shows positive dynamics in the production of certain types of dairy products, generation of many species of this food products except cheese has not reached the level of 1990.

As well as milk production of raw materials in RF spread unevenly also observed and the uneven distribution of the generation of dairy products. The analysis of manufacture of the basic kinds of dairy products and the level of independence in economic regions of our country in 2010 are presented in table 10 on the basis of statistical data [Demographic Yearbook of Russia, 2011, the Social situation and living standards in Russia, 2012].

TABLE 4  
MANUFACTURE OF THE BASIC KINDS OF DAIRY PRODUCTS BY ECONOMIC REGIONS IN 2012

<i>Name of the economic region</i>	<i>Production of whole milk, thousand tons</i>			<i>Production of cheese, thousand tons</i>			<i>Production oil, thousand tons</i>		
	<i>just</i>	<i>soul g/person</i>	<i>the level of independence, %</i>	<i>just</i>	<i>soul g/person</i>	<i>the level of independence, %</i>	<i>just</i>	<i>soul g/person</i>	<i>the level of independence, %</i>
Central areas of the European part of the Russian Federation	843,9	28,9	48,2	126	4,2	70,0	38,1	1,3	32,5
Central Chernozem region	401,2	55,8	93,0	60,8	8,4	140,0	20,6	2,9	72,5
West Siberian	548,4	37,4	62,4	88,8	6,0	100,0	24,4	1,7	42,5
Ural	684,3	35,5	59,2	37,6	1,95	32,5	29,9	1,5	37,5
North Caucasus	355,3	18,6	31,02	47,3	2,4	40,0	30,9	1,6	40,0
Far Eastern	88,4	14,9	24,8	2,5	0,4	6,7	4,6	0,8	20,0
East-Siberian	293,7	35,2	58,8	5,6	0,6	10,0	5,8	0,7	17,5
Volga	310,1	28,9	48,3	52,2	4,8	80,0	37,2	3,5	87,5
North	171,9	34,8	58,1	2,9	0,5	8,3	5,9	1,2	30,0
North-West	270,6	31,9	53,1	15,2	1,7	28,3	4,4	0,5	12,5
Volgo-Vyatsky	363,1	48,2	80,5	24,3	3,2	53,3	20,1	2,7	67,5

Based on the above presented data we can conclude that, despite the fact that the leader of the production of whole milk, butter and cheese in 2012 are the Central regions of European part of



Russia, but the leading position in the production of these categories of dairy products per capita, and hence on the degree of independence occupies the Central Chernozem region.

The production of whole milk leaders in the level of independence are the areas such as Central-Chernozem, Volga-Vyatka, and West Siberia, where he is 93.0%, 80,5%, 62.4 per cent respectively, whereas the lowest level of this indicator is observed in the far Eastern economic region - 24,8%. It is necessary to establish the fact that the number of cheese production in our country only Central-Chernozem and West-Siberian regions meet health standards per capita consumption (8.4 kg 6,0 kg, respectively), and the production of animal oil in the Russian Federation established medical standards there is no economic region.

You should note the fact that the consumption of dairy products, our country is far behind that of the developed countries. Thus, the level of per capita consumption of drinking milk our country was occupied in 2010 31 place for the consumption of butter - 29 place, and cheese - 27th place. According to the Order of the Ministry of health and social development of the Russian Federation (Ministry of health of 2 August 2010 N 593H, Moscow «on approval Of recommendations for rational norms of consumption of food products, which meet modern requirements of healthy nutrition» [www.minzdravsoc.ru] the norms of per capita consumption of milk and dairy products must be 320-340 kg per year (in milk equivalent), drinking milk - 60 kg, butter and cheese - 4 kg and 6 kg per annum respectively.

For 2011, per capita consumption of the population of our country was 248 kg of milk and dairy products that are below the norm by 20.6%, 77 kg of drinking milk per year, which exceeds the norm by 28.3%, 2.2 kg of butter, which is below the norm 45.0%, 5.7 kg of cheese, below the average of 4.5%.

It should be noted that, despite the recent increase in the production of dairy products, according to experts of the growth rate for this category of food products in our country is about 5 - 8% and higher than the rate of increase of its production (2 - 6%), which in turn leads to an increase in the share of imports of these products.

According to the Doctrine of food security [www.mcx.ru] specific weight of imported milk and dairy products on the domestic market this category of goods shall not exceed 10%. However, in 2010 the share of imported products in the General resources of milk and dairy products increased compared with 1992 by 10,5% and amounted to 16.6%. The most significant share of imports in such market segments as the production of cheese, butter and dry milk products. So on the Russian milk market the share of imports for cheese bold in 2012, compared with 1995 2.4 times and amounted to 48.2% of the total market. In 2012 the volume of import of a butter in comparison with the previous year decreased by 24.4% and amounted to 108,9 thousand tons, due to reduced demand for the dairy products. Dry dairy products in 2011 the share of imports exceeded the volume of own production and amounted to 68.3%. The largest share in the import of dairy products is occupied by the Belarusian producers. So, in 2012 in domestic import of cheese and cottage cheese, Belarus ranked 27,8%, in import of milk and cream condensed and dried and 70.2%, and import of butter and other milk fats to 47.8%. Russia currently exports of milk and dairy products is not developed and therefore does not affect the state of the domestic market in this product category. So, the share of exported dairy products to shared resources is insignificant and is within 2%. As exported dairy products are the cheese, condensed milk and cream, fermented dairy products. It is worth noting that more than 90% of the Russian dairy products are exported to CIS countries, particularly Kazakhstan and Ukraine.

Thus, as a result of rating evaluation of the economic regions by the level of milk production-raw materials, the number of cows and routes on one dairy cow was revealed, that at present there is a situation when the Central areas of the European part of the Russian Federation subject according to their specialization occupy a leading position in all the above options, inferior areas with milk-meat and dairy and beef.

Also this study suggests that the dairy industry as a whole in the country and in all regions of the Russian Federation is not without exceptions, is in a difficult and critical situation that is due to the transition from the Central government to the market type of management and, as consequence, crisis of agro-industrial complex as a whole. This circumstance is confirmed by the following facts: milk production by all categories of farms in 2012 below the pre-reform level by 42.7 %, and the livestock of dairy herds by 59.9%.

However, according to experts, Russia's accession to the WTO, import of dairy products will increase by 17.6 % to 9.3 million. so in 2014, compared with 2010. Thus, foreign companies on the

market of dairy products will continue to strengthen its position, displacing the domestic producers. Undoubtedly, in such conditions of severe competition without government support will lead to the fact that many Russian milk-processing enterprises go bankrupt and leave the market, and achievement of the indicators of food security Doctrine in the dairy products will be impossible. In order to solve the problems of dairy industry, self-sufficiency in the region of goods of the local production, as well as in the conditions of Russia's entry into the world trade organization requires comprehensive system solutions, which must have long-term character. State complex program of development of agriculture 2013-2020 provides for the continuation of the financial support of the most significant branches of agroindustrial complex, one of which, undoubtedly, is the dairy industry. In addition, the program aims to provide targeted assistance to the regions in the most promising directions of the agrarian sector-to-determine - the task of the regions themselves.

#### REFERENCES

1. Regions Of Russia. Socio-economic indicators. 2012: Stat. collection / Rosstat. - M, 2012. - 659 C.
2. Industry Of Russia. 2002: Стат.сб. / Goskomstat Of Russia. - M, 2002. - 459 с.
3. Industry Of Russia. 2010: Стат.сб. / Rosstat. - M, 2010. - 453 с.
4. Russian statistical Yearbook: Стат.сб. / Goskomstat of Russia. - M, 2012. – 679 C.
5. Demographic Yearbook of Russia. 2012: Stat. collection / Rosstat. - M., 2012. - 557 C.
6. Social status and living standard of population of Russia. 2012: Стат.сб. / Rosstat. - M., 2012. - 525 C.
7. Order of the Ministry of health and social development of the Russian Federation (Ministry of health of 2 August 2010 N 593н Moscow «on approval Of recommendations for rational norms of consumption of food products, which meet modern requirements of healthy nutrition» [Electronic resource]. URL: [http:// www.minzdravsoc.ru](http://www.minzdravsoc.ru) [ 25.09.2013 ].
8. Russian President decree of January 30, 2010 N 120 «On approval of the Doctrine of food security of the Russian Federation» [Electronic resource]. URL: [http:// www.mcx.ru](http://www.mcx.ru) [25.09.2013].

### **ROLE OF PHYSICAL TRAINING AND SPORTS UNDER CONDITIONS OF THE YOUTH'S HEALTH PRESERVATION AND PROMOTION, THEIR SOCIAL ADAPTATION, PERSONAL AND PROFESSIONAL BECOMING**

*ABSTRACT.* ONE OF THE ACTUAL SOCIAL PROBLEMS IS PROFESSIONAL BECOMING OF FUTURE EXPERTS WHO ARE READY TO RESEARCH, CREATIVE WORK AND REALIZATION OF OWN PROFESSIONAL AND PERSONAL POTENTIAL, AND ALSO ARE HEALTHY AND PHYSICALLY STRONG. THE AUTHOR CARRIES OUT THE RESEARCH AND ALLOCATES A NUMBER OF ORGANIZATIONAL AND PEDAGOGICAL CONDITIONS OF PREPARING LESSONS OF PHYSICAL TRAINING, THE REALIZATION OF WHICH POSITIVELY INFLUENCES ON FURTHER PERSONAL, SOCIAL AND PROFESSIONAL BECOMING OF STUDENTS.

*KEYWORDS:* THE PROCESS OF TRAINING, ORGANIZATIONAL AND PEDAGOGICAL CONDITIONS OF LESSONS, PHYSICAL FITNESS, SOCIAL AND PROFESSIONAL ADAPTATION, PERSONAL AND PROFESSIONAL BECOMING.

#### **MICHAEL GNEZDILOV**

CANDIDATE OF PEDAGOGIC SCIENCES, ASSOCIATE PROFESSOR AT THE CHAIR OF PHYSICAL TRAINING, KUZBASS STATE TECHNICAL UNIVERSITY NAMED AFTER T.F. GORBACHEV

At the present stage of the society development one of the most actual problems of education is personal and professional becoming of future experts. It is necessary to notice that employers' requirements grow. So, future experts have to orientate simultaneously in information streams, to solve business questions, to come into interpersonal contacts, etc. A modern enterprise needs, on the one hand, an expert with encyclopedic knowledge who can also think creatively and critically, ready to research, creative work and realization of his or her own professional and personal potential, socially and professionally adapted, on the other hand, hardworking, healthy and physically strong.

Social and professional adaptation is an integrative parameter of a person's conditions reflecting his or her abilities to carry out certain social and professional functions; adequate perception of social realm; adequate system of relations and communication with other people; ability to work, self-service and interactive service at home and work, variability (adaptability) of behavior according to other people's role expectations [1].

A social symbol of adulthood and manhood is teenagers' physical ageing. At this stage the change of social roles and ambitions frequently leads to a so-called syndrome of physical defect fear. In

some authors' opinion, it can lead to over uneasiness, decreasing of the level of ambitions, difficulties in communication, shyness and other psychological problems. As a rule, these problems result in decreasing of general self-estimation and self-esteem [2, 3]. Intensive functional development of the central nervous system proceeds: in conditional processes the role of the second alarm system grows, thus, ability to abstract thinking develops intensively. Cortical excitability, lack of balance of nervous processes, fast fatigability of glial cells of the brain is observed and therefore rapid change of mood and behavior which often seems to be unmotivated [4].

Growing age is characterized by development of some mental conditions which can be adversely shown in behavior, as well as in activity. One of the conditions which are typical for teenagers is the condition of uneasiness or as it is sometimes called situational uneasiness. When it is frequently repeated, it is fixed and becomes a steady personal characteristic; it becomes personal uneasiness [5].

The most interesting researches about growing age are those where peculiarities of teenagers' consciousness and self-estimation are shown. The physical component of self-estimation and a physical image have an important value as one of the factors of education and further personal, social and professional becoming. In this case interesting results are received by N.I. Alexandrova and T.F. Dubova [6] who appreciated teenagers' differences of self-estimation of physical images. It is revealed in their research work that at primary school age self-estimation is still being formed and depends completely on adults, parents, and teachers' inspired estimation. Primary school students' self-estimation is low. According to some parameters of physical qualities (the scale of beauty, weight, and dexterity) girls have higher self-estimation than boys. According to some other parameters (the attitude to sports, etc.) boys' self-estimation is higher. Concerning all variables of a physical image the highest self-estimation of physical qualities is observed at senior teenage age both for girls and boys.

Later in their work the authors formulated the concept. In the structure of their concept the following components are allocated: "actual ego" (how I identify myself), "social ego" (how I think other people identify me), "ideal ego" (what person I would like to be). It is necessary to notice that the listed terms are working ones so as "actual ego" is not the same as "objective ego". The authors discover psychological mechanisms causing the difference of estimations of "actual ego", and "social ego" with an individual's estimation. These points show antagonist functions of growing age. On one hand, it is so called difficult age when we can see the largest differences between teenagers' behavior and his or her self-estimation; on the other hand, this age is especially flexible and consequently it is favorable for various psychological and pedagogical correcting.

One of some other basic mental new growths of this age is also teenagers' aspiration to take a certain place in a group of people. In many respects teenagers start to listen to contemporaries' opinion, therefore their high tension and anxiety in relations with other people is frequently noticed. Teenagers' mutual relations are important; firstly, because constant infringement of such mutual relations is an exact parameter of some deviations in the process of mental development, secondly, because getting older the group of contemporaries influences more on each other's behavior and aims [7].

The major psychological changes can be occurrence of consciousness as some new opportunity of self-understanding connected with discovering of the world of own experiences. Systematizing, perception and regulation of these experiences become possible only with occurring of thinking and concepts [8]. Dissatisfaction of the need in a certain self-estimation often leads to occurrence of "conceptual barrier" between people and teenagers, and under certain conditions it leads to "effect of inadequacy" elimination of which demands specially organized correctional work [9]. Low self-esteem and communicative difficulties reduce social activity. Such teenagers, as a rule, occupy elective posts much more seldom, and they less participate in public life [10].

It is determined that general working capacity depends on some biological, psychological and social factors. According to N.M. Rudny, working capacity is considered as a person quality reflecting his or her ability to do a certain work, and as something identical to a functional condition, and as an ability to provide a certain set level of activity, an overall performance, and as limiting opportunities of a person [11]. Thus, it is possible to confirm that the level of physical development and physical readiness of the youth in many respects predetermine further development of personal and professional qualities, forming of positive attitude to future labor activity, and comprehension of own welfare. Lessons of Physical Training let teenagers strengthen their health, physical fitness, and to discover body competence, but also help them to form such

positive personal characteristics as willful firmness, moderation, and self-control, resolution, courage, etc. Physical Training also corrects such psychological and physical personal characteristics as increased level of uneasiness, aggression, decreased self-estimation which are frequently peculiar to the youth.

For many centuries scientists (J.J. Rousseau, P.F. Lesgaft, etc.) paid much attention to a question of interrelation of physical training with such processes as moral education, social adaptation, processes of personal and professional becoming.

So J.J. Rousseau [12] considered that “a weak body weakens a soul” and consequently it is necessary for a body to be strong enough for a soul. All sensual passions, in J.J. Rousseau’s opinion, can be found in a weak body. He considered that by their nature it is necessary for young people to jump, to run, to swim, and to bring all actions under the aspiration to physical strengthening. J.J. Rousseau noticed that physical training creates and develops the character.

P.F. Lesgaft [13] studied a problem of moral education in the process of physical training, and came to the conclusion that they were interconnected, and moral, strong-willed and ethic qualities can be formed with the help of physical exercises.

To R. Berne’s mind, the important content of the youth’s self-consciousness is a “physical ego” image which means the representation of a physical image, comparison and estimation from the point of view of “courage” and “femininity”. Features of physical development can cause decreasing of self-estimation and self-esteem, and also be a reason of fear of other people’s bad estimation. Defects of appearance (objective or nonobjective) can be experienced very painfully, to full self-negativism, a steady feeling of inferiority and lead to full disadaptation [14].

V.E. Krylov, V.E. Shovsky, etc. [15, 16] also studied the features of educational and correcting influence of Physical Training lessons on the youth. Their researches confirm that a special value of the didactic aspect of these lessons can be found in the pedagogical approach known as “closed” education when a student does not even guess that he or she is an object of the directed correctional work. Impellent tasks of various degrees of difficulty allow developing strong-willed personal qualities, and regular physical exercises form experience of positive activity.

Thus, physical training becomes an integral mechanism of personal correction, forming of personal and professional qualities, and positive attitude to future labor activity. In this connection it is necessary to allocate a number of organizational and pedagogical conditions of educational and training process realization of which will positively influence on further personal, social and professional becoming:

*1. Taking students’ interests into account in the process of physical training.*

The important factor is involving students in social kinds of activity the integral part of which is sports activity; in this case it is necessary to consider motives of playing sports, positive and negative personal qualities, etc.

So, in Yu.I. Zotov’s work [17] which is devoted to the motivation of sports activity, it is noticed that motives of activity are mental mechanisms. Forming and changing these mechanisms it is possible to control development, actions, acts, behavior of individuals and whole groups in any spheres and conditions of life.

The basic methods of involving are individual, group, and competitive methods. The means of involving students into sports activity can be acquaintance with new kinds of physical exercises, preparation to competitions, participation in refereeing of competitions, carrying out of lessons, etc.

*2. Creating of positive emotional atmosphere at the lessons.*

Positive emotional atmosphere is extremely important at the lessons of physical training. The lessons influence positively on development of impellent skills, and forming of interest to physical training and sports activity. They also influence on mental and emotional sphere, forming of adequate personal self-estimation, positive motivational sets, correction of negative mental processes. Creating of positive atmosphere inside the group can be carried out due to introduction of psychophysical training exercises into educational and training process. These exercises are directed on creating of preconditions for students’ personal growth, establishments of interpersonal relations, and showing of positive personal qualities.

It is necessary to notice that training exercises stimulate inclusions of students’ mental reserves which were not used before. They give some additional impulse to personal development, allow looking newly at many questions, and help to see self-activity in wider, more cultural context. In the educational and training process some training exercises directed on the development of attention and self-checking can be used such as “Fingers”, “A Fly”, “Focusing”, etc.; training exercises directed



on the development of imagination and self-control such as “A Labyrinth”, “An Acrobat”, “A Magic Pencil”, etc.; training exercises directed on the development of communication abilities such as “A Coin”, “A Homeostat”, “A Rank”, etc.; training exercises directed on relaxation, etc.

### *3. Selecting of adequate pedagogical techniques, methods and forms of lessons organization.*

One of the major conditions of environment forming which is directed on the youth's health preservation and promotion is selecting of pedagogical techniques, methods and forms of lessons organization. They are directed not only on the youth's physical development but also they will have a positive influence on a personal psychological and emotional sphere and create preconditions for positive socialization. It has been already mentioned that during the process of development of impellent qualities, and general physical condition there is also simultaneous forming of personal adequate self-estimation, creating of positive motivational orientations, correcting of negative mental processes, etc.

Educational and training process should be systematic (3-4 times a week) and continuous (all-the-year-round). At the initial stage as the basic form of lessons organization it is reasonable to use a circular method in combination with repeated and serial one. Physiological stress should be within the limits of 130-160 beats/min. At the forming stage a circular, and repeated and serial method can be used. In the process of interest increasing to lessons of physical training and sports a competitive method is used. At the specialized stage such methods as repeated and serial, competitive, individual lessons with physiological stress up to 170 beats/min are usually used.

So, if to speak about the organization of educational and training process, the year cycle can be divided into three basic stages: health-improving and stimulus, health-improving and supporting, and specialized. At each stage the objectives are defined and selecting of certain methods and techniques is carried out.

#### Objectives of the health-improving and stimulus stage:

1. Forming of the youth's interest to regular physical training lessons.
2. Studying of the youth's personal and psychological qualities with the purpose of revealing of possible negative parameters influencing on their further personal, social and professional becoming.
3. Realization of selecting of means and methods of physical training directed on possible correction of physical, psychological and emotional condition.

So, at the given stage much attention should be paid to increasing of students' general physical preparation, strengthening of musculoskeletal apparatus, muscular system, and also development of the basic impellent qualities, general endurance, speed, strength, dexterity. Forming of general endurance is provided by long training performance which corresponds to moderate and large capacity. General endurance develops by means of various physical exercises involving more than 2/3 muscles of a body. Besides at the given stage forming of interest to sports, and also correcting of negative personal qualities with further education of diligence, honesty, persistence and initiative is carried out. So, much attention is paid to the decision of problems of discipline. Alignment, reporting, precise performance of various commands, attentive attitude to a teacher's explanation is good disciplining means.

#### Objectives of the health-improving and supporting stage:

1. Forming and strengthening of a skill of individual physical exercises.
2. Developing of moral and strong-willed qualities, motivational orientations, and an ability to carry out a trainer's requirement.
3. Developing of positive personal qualities, forming of adequate self-estimation, and decreasing of the level of uneasiness and aggression.

The given stage is also directed on development of impellent qualities, dexterity, flexibility, will power and endurance. At the given stage students' enthusiasm becomes their prevailing stimulus to physical training and sports. Means of physical training are directed not only on perfection of general and special physical readiness, but also on such moral and strong-willed qualities as self-control, endurance, boldness and skill to supervise acts. At the given stage the pedagogical techniques which normalize the increased level of aggression, and uneasiness are used. Correcting of students' personal qualities and activity is achieved by introduction of training exercises into educational and training process. Their purpose is psychological warm-up, development of skills of rallied actions, trust to a partner, organization of positive psychological climate, increasing of communication skills, self-estimation, concentration of attention, etc.

#### Objections of the specialized stage:

1. Fixing of a settled habit to be engaged into physical training and sports.
2. Correcting of physical qualities, psychological and emotional conditions.
3. Strengthening of moral and strong-willed personal qualities.

At the given stage the perfection of students' impellent qualities, work at psychological and emotional condition and social adaptation continues. The exercises directed on development of the basic physical qualities are used in the following sequence: high-speed exercises, vigorous exercises and exercises demanding general endurance. For the given stage the specific development and demonstration of special physical qualities are typical: e.g., strength, speed, dexterity in playing basketball. Accordingly, exercises for the development of speed and spring ability, exercises for the development of dexterity are offered. Students' technical and tactical training is carried out: e.g., the technique of moving, the technique of a game, attacks and protection is fulfilled. The development and perfection of self-educational skills in the basic kinds of activity (educational, sport, and social) are carried out. The perfection of impellent qualities and improvement of psychological and emotional condition, social adaptation, the ability to control behavior and emotions are also carried out.

It is necessary to notice that the basic form of physical training lessons is a lesson consisting of three interconnected parts - preparatory, basic and final. The obligatory condition of lessons is active use of the means providing the youth's all-round physical development. 40-50% of the time of a lesson is given to general physical training. Gymnastic exercises, exercises taken from sports and outdoor games are also used at the lessons. 50-60% of the time of a lesson is given to special physical and technical and tactical training. Such lessons help to develop and improve the qualities which are necessary for successful specialization in a certain kind of sports, e.g., basketball. Correcting of physical and mental condition is carried out during the whole academic year by the use of a complex of pedagogical techniques, means of physical training and methods of psychological correction.

The central place in the preparatory part of a lesson is taken by functional preparation of a body to the forthcoming basic part. It can be achieved due to the use of the exercises which are easily dosed out and do not demand long time for learning them. Also a teacher pays attention to solving problems connected with discipline. Alignment, reporting, precise performance of various commands, attentive attitude to a teacher's explanations is good disciplining means. Activity and psychological freedom can be achieved due to the introduction of training exercises such as "Burst way through the crowd" and "Molecules" the purpose of which is to warm-up, to develop skills of rallied actions, trust to a partner, and to organize positive psychological climate.

In the basic part of a lesson some tasks of general and special physical training are solved. As a rule, the most difficult tasks connected with mastering some new material are offered at the beginning of the basic part. The exercises directed on the development of the basic physical qualities are given in the following sequence: high-speed exercises, vigorous exercises and exercises demanding general endurance. In the basic part of a lesson some special training exercises can be used. They usually focus on concentration of attention, solidarity of a group, increasing of self-estimation ("A Ferry", "Persecutors", and "Protection of defense"). The basic method is a method of strictly regulated exercise providing precise definition of an exercise, intensity of performance, intervals of rest between attempts, number of recurrences, number of series and intervals of rest between them. To increase students' emotional condition game and competitive methods are used.

In the final part of a lesson some exercises for gradual decreasing of functional activity of a body are selected: jogging, walking, relaxing, autogenous exercises. The important thing of this part of a lesson is summarizing and giving homework.

So, it is noticed that successful and effective carrying out of physical training lessons under conditions of the youth's health preservation and promotion, social adaptation, personal and professional becoming is impossible without taking some organizational and pedagogical conditions into account. Adequate pedagogical management of sports activity promotes better educational and training process. At such lessons not only some physical qualities are formed, developed and improved but also some moral and strong-willed personal qualities, motivational needs, some certain social qualities which will promote better students' adaptation to the future successful professional work.



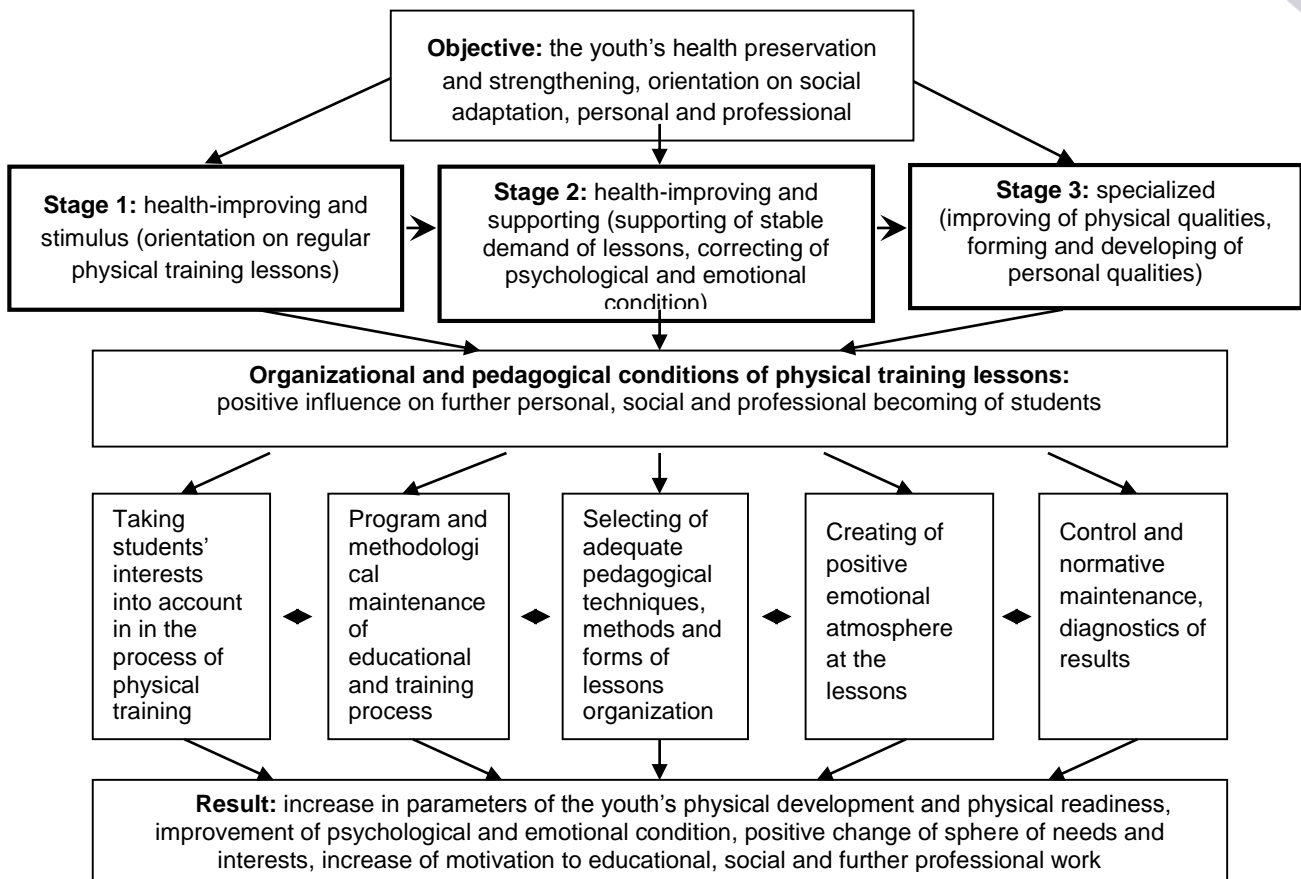


FIG. 1 ORGANIZATIONAL AND PEDAGOGICAL CONDITIONS OF PHYSICAL TRAINING LESSONS

#### REFERENCES

1. Great encyclopedic dictionary / ed. A.M. Prokhorov. - M.: Norint, 2004. - 1600 p.
2. Heller M.E. Organization forms and introduction methods of physical training and health-improving work with population in the place of their living: thesis synopsis of a candidate of pedagogical sciences. - Minsk, 1983. - 29 p.
3. Novikova E.V. Diagnostics and correction of younger schoolchildren and teenagers' school disadaptation // Problems of schoolchildren's psycho diagnostics, education and development. - M., 1985. - P. 152-160.
4. Kon I.S. Social psychology. - Voronezh: Practical psychology institute, 1999. - 560 p.
5. Khanin Yu.L., Bulanova G.V. Management of students' emotional condition by means of physical training // Stress and uneasiness in sports. - M., 1983. - P. 261 - 267.
6. Alexandrova N.I., Dubova T.F., Zhorov P.A., Kadyrov D.R. Consciousness development as a basis of physical training. Forming of "I" image and problems of physical education: collection of proceedings / ed. P.A. Zhorov. - M., 1990. - P. 9-12.
7. Slutsky V.M. Senior schoolchildren's social isolation and mental development: analysis of cognitive, emotional and personal development // Psychological magazine. - 1996. - # 1. - P. 86-94.
8. Kle M. Teenager's psychology. Psychological and sex development. - M.: Pedagogy, 1991. - 176 p.
9. Slavina L.S. Individual approach to non-achieve and undisciplined students: collection of scientific papers of research conference. - M.: VNII MVD, 1990. - 123 p.
10. Prikhozhan A.M. School uneasiness and self-estimation at the senior teenage age // Psychological problems of training and education quality improvement. -M., 1984. - P. 76-88.
11. Bodrov B.A. Psychological stress: doctrine development and modern condition of the problem / RAN, Psychology Institute. - M.: IP RAN, 1995. - 136 p.
12. Rousseau J.J. Emil, or about Education. -M., 1987. - P. 205-295.
13. Lesgaft P.F. Selected works. - M.: FiS, 1987. - 358 p.
14. Berne R. Development of "I-concept" and education. - M., 1986.
15. Krylov V.E. Main directions of educational correction and training technique: collection of scientific papers of regional research conference. - Rostov-on-Don, 1999. - P. 120-121.
16. Shovsky E.V., Sivkov E.P. High school as a center of preventive maintenance of offences in the district: collection of scientific papers of regional research conference. - Rostov-on-Don, 1999. - P. 124-126.
17. Zotov Yu.I. Teenager upbringing in a sport team. - M.: Physical training and sports, 1984. - 104 p.
18. Kabachkov V.A., Kurentsov V.A., etc. Organizational features of educational and correctional process of neglected children physical training: VNIIFK proceedings. - M., 1999. - P. 85-90.

**SOME COEVAL INFORMATION  
LITERACY STANDARDS  
IN ANTHROPOLOGY AND SOCIOLOGY**

*ABSTRACT.* THE ARTICLE REGARDS SOME REQUIREMENTS CONCERNING INFORMATION LITERACY AND COMPETENCES WHICH HAVE BEEN EXHAUSTIVELY DETERMINED BY ASSOCIATION OF COLLEGE AND RESEARCH LIBRARIES (ACRL). ON THEIR BASIS THE ACRL ANTHROPOLOGY AND SOCIOLOGY SECTION (ANSS) HAS DETERMINED SOME INDICATORS OF THE STUDENTS' INFORMATION LITERACY DEVELOPMENT [3]. THESE INDICATORS ARE ORIENTED TOWARDS A RESEARCH PROCESS' METHODOLOGY AND TOOLS IN CULTURAL ANTHROPOLOGY, BIOLOGICAL ANTHROPOLOGY, LINGUISTIC ANTHROPOLOGY, ARCHEOLOGY, SOCIOLOGY, CRIMINOLOGY, DEMOGRAPHY.

*KEYWORDS:* INFORMATION, DATA, COMPETENCES, ANTHROPOLOGY, SOCIOLOGY.

**YULIY STAVROPOLSKY**

PH. D., ASSOCIATE PROFESSOR OF GENERAL AND SOCIAL PSYCHOLOGY AT SARATOV STATE UNIVERSITY

Information literacy within specific scientific branches presupposes defining some information needs within the peculiar discipline's context, finding and evaluating various data, materials, and information required for implementing a research in the selected issue, information synthesis for the sake of accomplishing the afore set objectives, knowledge augmentation and participation in the given scientific discipline's discourse [1].

Like other social sciences anthropology and sociology claim a scholar their own set of requirements authorized by their scientific particularity. For instance, when a scholar studies some anthropological facets of other cultures, one cannot help addressing their ethnographic contexts. Similarly when studying such sociological issues as immigration or inequality one cannot help appealing to such theoretical and empirical data which interpreting demands some specific skills. When doing a field research, when computing the secondary data analysis, an adequate comprehension and exact description are unavailable without turning towards some specific evaluation methods [2].

Information literacy requirements with an exhausting set of competences have been determined by Association of College and Research Libraries (ACRL). On their basis the ACRL Anthropology and Sociology Section (ANSS) has determined some indicators of the students' information literacy development [3]. These indicators are oriented towards a research process' methodology and tools in cultural anthropology, biological anthropology, linguistic anthropology, archeology, sociology, criminology, demography.

The ANSS standards determine some criteria of the scientific research effective implementation by students revealed in demonstrating by the students their information literacy. The ANSS information literacy standards embrace three general directions:

- interaction of the faculty and librarians in refining the students' critical attitude in research and incorporating the students' researches outcomes into the delivered courses;
- rendering assistance to librarians in forming the content of the delivered courses and in planning some events targeting at the anthropology and sociology students' information literacy development;
- opening chances for the anthropology and sociology students' information literacy evaluation by means of ensuring their accesses to standards and competences.

The ANSS information literacy standards and competences have been determined hierarchically from the simplest towards the most complex ones. Each of the four main standards includes some ethic elements of the research activity. In virtue of such an approach the ethic requirements have been contextually dovetailed with theoretical knowledge and practical proficiency. In reference of such research methods as participant observation, interview, and visual anthropology the ethic requirements play a decisive part even prior to the research proper and retain their significance at the stage of the obtained data generalization [4].

The first ANSS information literacy standard determines the piece of knowledge about the demanded information.

An anthropology and sociology student is suggested to be able to:

1. Decide what exact piece of information s/he is in need of.

This ability requires the following competences:

a. Proceeding from the existing set of the research issues in sociology and anthropology a student should decide and verbalize an empirically feasible topic of the research by employing specifically sociological and/or anthropological terms, methods of study, and disciplinary context.

b. Learn the main theoretical sources on anthropology and sociology for the sake of expansion the acquaintance with the research issue.

c. Choose and recapitulate the main notions, terms, theories, cultural groups, regions, and names relevant to the research issue for the sake of amassing information concerning them.

d. After having learnt literature on the research issues and having commenced the research proper, the student ought to revise his/her extent of need in additional information on the research issue.

2. Determine the most appropriate methods for examining the selected issue.

This ability requires the following competences:

a. Evaluate the quantitative and qualitative anthropological and sociological research methods' application to the tendered project implementation on the basis of the information demand in the data.

Ethic, socio-cultural, and legal competences:

b. Express one's attitude and show one's comprehension of the institutionalized policy in reference to doing a research on human subjects, including a requirement of informed consent.

c. Have cognizance of definitions and express one's attitude to such ethic matters as privacy, confidentiality, etc. from the viewpoint of the ASA and AAA ethical codes.

3. Be aware that anthropological and sociological information may come from various sources and shape various forms.

This ability requires the following competences:

a. Know about formal and informal ways of producing and disseminating pieces of information in anthropology and sociology such as the censuses data, field noted, artifacts, databases, conferences proceedings, scientific web-sites, peer reviewed scholarly journals, etc.

b. Mind that the anthropological and sociological pieces of knowledge organization formats can impact on their accessibility and evaluation by means of scholarly journals, generally accessible mass media, conferences proceedings, museums, scholarly articles' databases, archival databases, etc.

c. Differentiate among primary and secondary sources in anthropology and sociology, be aware of benefits of each kind of the sources, whilst the primary sources are field notes, secondary sources are bibliographic references of scholarly features.

d. Understand that the available information can in conjunction with own ideas, empirical data, and analysis' outcomes produce new information about society, social phenomena, cultural complexions, social theories.

4. Consider that costs and advantages related to looking for the needed information.

This ability requires the following competences:

a. Detect the required information availability and expand the information search borders out of the local resources' limits for the sake of obtaining the pieces of data which are unavailable from the university library, the university archives, on-line. For instance, apply to the interlibrary exchange system, make requests abroad, and receive the required graphic, video, audio, and text resources.

b. Compile a virtual blue print and schedule of obtaining the necessary pieces of information, of field work, of data analysis, of acquirement of the necessary skills.

Ethic, socio-cultural, and legal competences:

c. Determine and discuss issues related to free/payable access to information, considering unequal information access chances at home and abroad.

The second ANSS information literacy standard determines the virtual, competent, and ethic access to the demanded information.

An anthropology and sociology student is suggested to be able to:

1. Select the most appropriate information sources and databases.

This ability requires the following competences:

a. Search and pick the required pieces of information in the scholarly articles' bases, library catalogues, and the most relevant to the research other sources.

b. Differentiate among databases which employ the up-to-date indexing of scholarly journals, book chapters, dissertations, and conference proceedings in anthropology and sociology; electronic databases containing journal features' texts in various scientific disciplines with limited information

in anthropology and sociology; databases or journal features licensing systems. Find access to scientific materials published in a non-traditional format.

c. Be aware when the on-line databases' search is appropriate. Differentiate one's attitude to information sources detected by means of search devices.

Ethic, socio-cultural, and legal competences:

d. Be aware and follow legislation and university requirements concerning the information resources' access, texts, data, graphic images, field notes, visual and audio materials storage and dissemination,

2. Develop, apply, and refine the search strategies founded upon the use of information search multiple methods.

This ability requires the following competences:

a. Use adequate sociological and anthropological terminology, employ key words, synonyms, and databases' indexing terms while searching through databases.

b. Develop and efficiently implement the search strategies through multiple databases applying such advanced functions as truncated search, similarity search, etc. Specify search requests as the research progresses for the sake of obtaining some complementary information.

c. As the research design integral part search and find books, scientific journals, and other sources adequate to the search request including surveys, interviews, on-line communities' discussions texts, in multimedia sources, from knowledgeable proficient, from libraries, faculties, scholarly community.

3. Trace pieces of information and their sources.

This ability requires the following competences:

a. Quote and make bibliographical references in an exact manner following the documentation style adopted by the ASA, AAA, APA.

b. Commit in a systematic manner all the information that would be needed for the future quotations.

Ethic, socio-cultural, and legal competences:

c. Know when one must quote a source for the sake of observation of the intellectual property copyright and exactly state where the quoted words and ideas have been verbalized.

The third ANSS information literacy standard determines the critical evaluation of pieces of information and their sources, integration of the selected pieces of information to the knowledge base and to the evaluation system.

An anthropology and sociology student is suggested to be able to:

1. Generalize some main ideas subject to extraction from the amassed information, and synthesize some principal ideas for the sake of some new conceptions' construction.

This ability requires the following competences:

a. Pick some cardinal ideas from texts (books, scholarly articles, interviews), paraphrase them in scientific terms, choose some verbal material fit for quotations.

b. Bring out some interrelations among notions, social theories, field observations and other data, draw up from them some potentially useful initial statements and find their verifications.

c. Engage some technological methods for examinations of interrelations among some ideas and other phenomena, e. g. audio and video equipment, statistic and software packages.

2. Apply some appropriate information pieces' and sources' evaluation criteria.

This ability requires the following competences:

a. Examine and compare some pieces of information obtained from various sources for the sake of defining the information reliability, validity, accuracy, authority, timeliness, opinion.

b. Be aware that a large quantitative volume of information available by the search databases proves nothing concerning the information quality, that the information sources' appropriateness for a research project demands their evaluation.

c. Find alternative viewpoints through databases, books, articles, always evaluating the information source and ergotism when making a decision about including the pronounced views to one's own research or declining them.

d. Analyze the reasoning and methodology structure and logic within the contexts of either anthropology or sociology, be aware what a valid verification should consist in, analyze the conclusions validity, bring out prejudices, deceit, and manipulations.

e. Understand the impact of some cultural, physical, and other contexts on creation, availability, and interpretation of information. For instance, whether the scholar has enjoyed a full access to the

civil sources of information, to the population at issue, has been subject to censorship or culturally prescribed limitations to amass the information, who had ordered the research, what data or viewpoints have been omitted in the course of the analysis.

Ethic, socio-cultural, and legal competences:

f. Understand and discuss issues related to censorship and freedom of speech at home and in the countries of the research.

g. Understand and discuss issues related to privacy and information security, e. g. cases when field studies may entail legal proceedings or when civil bodies may demand primary research data.

h. Understand and discuss issues related to social consequences of the information technologies' new formats applications, e. g. information unequal access issues, on-line communities formation, Internet as an ethnography tool.

3. Compare new knowledge with earlier one for the sake of determining the committed deposit, detecting the contradictions, defining the new information features, take steps towards reconciliation of contradictions.

This ability requires the following competences:

a. Enregister the information search process for the sake of explanation and evaluation of the performed research.

b. Determine whether the amassed information satisfies the research needs, pick the information confirming the set of the research issues, incorporate the new information, come to conclusions on the basis of the amassed information.

c. Request the keymen's opinion in interviews, by e-mail, etc. from the anthropology and sociology faculty, from proficients in the field of research for the sake of obtaining some evidences of essentiality and interpretation of the amassed information.

d. On necessity rephrase the search quest on the bases of the obtained data, expand the search strategies for the sake of engaging some broader notions or widening some ideas synthesis, including linguistics, education, political studies, geography, ethnography, psychology, botany.

The fourth ANSS information literacy standard determines the efficient and ethic use of information for the sake of achieving the specific target.

An anthropology and sociology student is suggested to be able to:

1. Put on new information and research outcomes to design, develop and review some specific projects or presentations.

This ability requires the following competences:

a. Arrange and amalgamate content, quotations and paraphrase so that the targeted objective and the outcome format or presentation would be fit. E.g. buckle a summary, an oral report, graphs, video engaging some presentation software, present digital data and visual images.

b. Render an account of some successes, failures, alternative strategies of some earlier researches for the sake of integrating within one's presentation some already existing and new information. Use audio and graphic files to enhance the comprehensibility of the presentation.

Ethic, socio-cultural, and legal competences:

c. Display comprehension of plagiarism, do not set up someone else's research for one's own.

d. Introduce participants of the research project in concordance with personal deposit of each one.

2. Efficiently for the audience render an account of the project, publication or presentation.

This ability requires the following competences:

a. Pick such means, formats and styles to file information which would fit best the research outcome or presentation for the specific audience. E. g. unite maps, artifacts' pictures and field diaries' texts using the PowerPoint package.

b. Incorporate into the research project presentation various formats and technologies thus integrating design and communication principles.

Ethic, socio-cultural, and legal competences:

c. Show comprehension of intellectual property, copyright and fair use of licensed materials. Obtain necessary permissions for the copyright owners.

d. Share the research production observing the ethic principles of ASA and AAA.

---

## REFERENCES

1. Burawoy M. Combat in the Dissertation Zone // *American Sociologist*, 2005. No. 2 (36). P. 43 – 56.



2. Owusu-Ansah E. K. Information Literacy and Higher Education: Placing the Academic Library in the Center of a Comprehensive Solution // Journal of Academic Librarianship, 2004. No. 1 (30). P. 3 – 16.
3. Association of College and Research Libraries. Information Literacy Competency Standards for Higher Education. (2003 r.). – URL: <http://www.ala.org/ala/acrl/acrlstandards/informationliteracycompetency.htm>.
4. Grauerholz L., Bouma-Holtrop S. Exploring Critical Sociological Thinking // Teaching Sociology, 2003. No. 4 (31). P. 485 – 496.

## INNOVATIVE PEDAGOGICAL MANAGEMENT: ESSENCE, FEATURES AND REALIZATION CONDITIONS IN EDUCATIONAL INSTITUTION

**ABSTRACT.** IN THE ARTICLE WE TRY TO ANALYZE THE MODERN UNDERSTANDING OF MANAGEMENT IN EDUCATION AND ITS TENDENCIES. WE CONSIDER CHARACTERISTIC FEATURES OF THE INNOVATIVE PEDAGOGICAL MANAGEMENT AIMED AT STIMULATION OF THE PROCESS OF PERSONAL SELF-DETERMINATION.

**KEYWORDS:** INNOVATIVE PEDAGOGICAL MANAGEMENT, CHARACTERISTIC FEATURES, INNOVATIVE PROCESSES.

### **ELENA TERESHCHENKOVA**

CANDIDATE OF PEDAGOGICAL SCIENCES, PROFESSOR RAE, ASSOCIATE PROFESSOR OF «MANAGEMENT» CHAIR, THE VOLGOGRAD BRANCH OF THE MOSCOW HUMANITARIAN AND ECONOMIC INSTITUTE

### **JULIA GOLCHENKO**

CANDIDATE OF ECONOMIC SCIENCES, ASSOCIATE PROFESSOR OF «FINANCE, ACCOUNTING AND AUDIT» CHAIR, THE VOLGOGRAD BRANCH OF THE MOSCOW HUMANITARIAN AND ECONOMIC INSTITUTE

In the modern society, education and economy are interdependent and interconnected, however, as A.G. Pashkov notes, these are the different sociocultural institutes serving for satisfaction of different requirements of society [1]. Education is the object consisting of more difficult cultural, social and economic relations, than purchase and sale.

The educational institution working in a search mode, considerably differs from those educational institutions whose purpose is a stable traditional functioning that leaves a certain mark on complete system of pedagogical management.

Pedagogical management is interconnected with creative activity of its participants. In V.P. Simonov's research "Pedagogical management: 50 know-how in the field of management of educational process" pedagogical management is understood as the theory, technique and technology of effective management by educational process. In general sense, "management" is understood as the ability of the head to realize goals using motivation, intelligence, professional opportunities of other people, or art and management science synthesis by social processes, the phenomena and communities of people.

In translation from English "management" has three semantic values: the persons engaged in the administrative activity in the field of business; the public institute having impact on all fields of activity of society (business, policy, etc.); the scientific discipline studying social aspects of business management (organization).

The term "management" in Russian has the following semantic value: system of means, principles and forms of plant management (organization). We focus attention on pedagogical management, that its many theoretical positions and postulates work in any sphere of human activity and in education.

The analysis of various sources shows that in most cases the concepts "management" and "social management" practically coincide.

Thus, the carried-out analysis of various semantic aspects of the category "management", allows to structure semantics of the category "pedagogical management" assuming the following interconnected values:

- only processes, but also the people who directly carry out processes or otherwise influence processes,
- control exercised in the social and pedagogical environment,
- pedagogical impact on people is carried out.

Innovative researches in the field of management of education go to the modern period of the development of domestic pedagogical school in the following directions:

- modelling of the new maintenance of department of education;



- design and realization of new technologies, techniques, systems of development of pedagogical management.

Generalizing and systematizing modern understanding about management in education, we should note such tendencies of development of pedagogical management (Yu. A. Konarzhevsky, G. N. Serikov, P. I. Tretyakov, T. I. Shamova, etc.) as:

- personal orientation of management (orientation at first to the person, and then to business);
- broad delegation of powers from top to down, collective decision-making;
- complete view of the subordinate as the personality, the humane attitude towards him;
- creation of conditions for a collective goal-setting and direct participation of employees in development of ways of achievement of goals.

As management of any other branch of human activity, pedagogical management have certain regularities and specifics: hierarchy of management, the organization, the main tool is the impact on the person by means of motivation, stimulations, planning, the organization and control; culture of management (recognized by society, the organization of features of behavior, values, social rules of law and installations).

It should be noted also that modern pedagogical management possesses the following potential:

- it allows to pass to the horizontal system of professional cooperation founded on corporate management style, considering the humane attitude towards each participant of management, personal focused approach to the activity of achievement of the maximum results;
- it provides development of each personality, coordinates motivational orientation of participants of educational space;
- it supports comfortable psychology and pedagogical climate for all participants of educational space.

According to Utkina E.A. "... the head of educational institution is "conductor" of the state educational policy, and in the administrative activity it has to build "bridge" between priorities in the development of the state educational policy and real educational practice" [3]. For this purpose, the head needs to know innovative reference points in the development of education.

In V. I. Slobodchikov's researches it is noted that "design, as a form of reasonable activity in which the competent pedagogical innovation is feasible and which already has historical precedents can become the only and basic barrier on a way of an innovative administrative lawlessness" [4].

Modern pedagogical management uses such widespread type of intellectual activity as design, owing to reproducibility of results of engineering activity, in possibility of its recurrence at different times, different performers and in different places and, at various combinations of not repeated and repeated unique components.

The basis of design is the design imagination, which creates design images, being a plan of future conditions of vital, socially significant objects in which the care of life of society would be considered as the satisfied.

It is necessary to consider that fact that pedagogical technologies including educational, yielding positive results at usual working hours of educational institution, do not allow to achieve the new desirable objectives during the work in an innovative mode. IT IS RIGHT TO SPEAK ABOUT MANAGEMENT AIMED ON innovations, which possesses by set of distinctive features in comparison with the management aimed at stable functioning

The innovation is the phenomenon bearing the essence of a way, technology and the organization and as contents new; however, innovative process reflects in itself formation, formation and development of the contents and the organization of the new.

We believe that innovative pedagogical management is the process, allowing operating the development of the educational institution, carried out based on innovations. Now in Russia the theory and technique of innovative management in social and economic systems are considered in I. T. Balabanov, Yu. P. Morozov, N. Rysev, R. A. Fatkhutdinov's works, etc.

In the cycle of the development innovative pedagogical management as process assumes:

- goal-setting,
- modeling of new idea,
- implementation of the conceived idea,
- correction and reflection,
- introduction and idea distribution,
- recession and fading.

In the conditions of innovative pedagogical management the process of personal self-determination of trainees, and teachers becomes more active. It is reflected on the character of relationships of people. In the innovative pedagogical management the educational institution has some stages: "fear of innovations" (not courage) – "speaking" - "formation" - "coauthorship" – "group of adherents" (maturity). Stages "coauthorship" and "group of adherents (maturity)" are stages of high understanding by collective of innovative process that is characterized by reflection existence at each personality. Collective development from stage to stage "group of adherents" completely correlates "fear of innovations" with a speed of change of innovative cycles of pedagogical management.

At all stages as a link the administrative consultation assuming acts: goal-setting, analysis, planning of pedagogical technologies, organization and implementation new, experimental control, reflection, and correction.

Having carried out the analysis of distinctive features of innovative management in social and economic systems (Yu. P. Morozova, N. Rysev, R. A. Fatkhutdinov, etc.), we specified the following characteristic features of innovative pedagogical management:

- possibility of achievement of considerable good results, than at stable functioning,
- uncertainty of the end results,
- the increased fluidity of pedagogical shots,
- the positive relation to new,
- novelty of performed works,
- the increased difficulty of determination of parameters both for educational institution as a whole, and for its separate components, processes, the subjects involved in educational process,
- the increased influence of the destabilizing factors, which overcoming owing to high adaptability of management, allows to consider various not provided situations,
- possibility of realization by participants of innovative process of personal requirements of the highest level: self-expression, self-updating, social requirements, high creative results,
- need of continuous increase of professional competence of participants of innovative process,
- possibility of expansion of system of requirements to personal qualities of participants of innovative process.

It is indisputable that the object of innovative pedagogical management is participants of educational space, and, the result of activity is defined by probabilistic character that in turn has to entail minimization of deviations from predicted result.

Important component of innovative pedagogical management is development of criteria of productivity of activity of educational institution based on new methodology of budgeting and management.

In order to avoid a set of mistakes it is necessary to carry out analytical justification of model of innovative pedagogical management at a stage of its design, on the following system of criteria:

- interrelation of structural parts or blocks, their sequence, logic, constructability,
- defects, shortcomings, mistakes,
- reasonable recommendations and additions to the program,
- the expert opinion (it is recommended to realization or completion according to noted remarks is necessary).

In the innovative pedagogical management, the control of results assuming is especially actual also:

- expert and analytical estimation of the reached results, ascertaining and acceptance of the corresponding conclusions for carrying out work on regulation of process of pedagogical activity;
- assessment of concrete results and the corresponding conclusions for correction of behavior and collective activity;
- assessment of results of innovative management according to the purposes and the corresponding conclusions on regulation of operating influences;
- straight line and feedback establishment for informing, stimulations of participants of innovative pedagogical management.

For successful development of educational institution it is necessary to consider and the following conditions of realization of innovative pedagogical management:

- need for innovations;
- standard legal support and the conceptual support of public administration defining a trajectory of a development of education as a whole and its separate levels;
- personnel maintenance;

- information maintenance;
- the analytical maintenance consisting in selection, distribution of procedure of introduction of results;
- innovative culture of participants of educational space.

We believe that the development of any social and economic process including innovative pedagogical management, occurs at difficult interaction of a complex of external and internal factors, therefore, arises need for design of factorial model of innovative pedagogical management for educational institution of the concrete type, allowing to study, measure influence of factors on its level.

The factorial model is been by a kind of the economical and statistical model representing formalized ratios, the elements describing the main interrelations forming social and economic system. The system of economical and statistical models serves for the description of rather difficult processes of economic or social character. Factorial models describe dependence of level and dynamics of this or that indicator on level and dynamics of economic indicators influencing it – arguments or factors. Factorial models can include various quantity of variables and parameters corresponding to them.

#### REFERENCES

1. Pashkov A.G. Pedagogika of professional education / under the editorship of V.A. Slastenin. - the 2nd prod. stereotype, M.: Academy, 2006.-368c.
2. Simonov V.P. Pedagogical management: 50 know-how in the field of management of educational process. [Text]/accusative Simonov. – M.: Rospedagenstvo, 1997. – 264c.
3. <http://sibac.info>
4. Slobodchikov V. I. Anthropological prospect of domestic education//Anthropological prospect of domestic education. Moscow – Ekaterenburg, 2009.

### INDIVIDUALIZATION OF EDUCATION FOR CHILDREN WITH SPEECH DEFECTS IN PRESCHOOL EDUCATIONAL PROCESS

**ABSTRACT.** THE ARTICLE IS DEVOTED TO THE PROBLEM OF INDIVIDUALIZATION OF EDUCATION IN ACCORDANCE WITH THE SEVERITY OF PRESCHOOL CHILDREN DEVIATION. THE INDIVIDUALIZATION OF EDUCATION IS ONE OF THE MAIN FORMS OF WORK FOR SPEECH THERAPISTS AND PRESCHOOL TEACHERS.

**KEYWORDS:** INDIVIDUALIZATION, DIFFERENTIATION, CHILDREN WITH SPEECH DEFECTS, SPEECH CORRECTION WORK, SPEECH THERAPY CENTER.

#### **SVETLANA SHATROVA**

CANDIDATE OF PEDAGOGIC SCIENCES, ASSOCIATE PROFESSOR, VOLGOGRAD STATE SOCIO-PEDAGOGICAL UNIVERSITY

Each person is unique in its individuality, which is expressed in individual features. Any impact on a child is refracted through its “internal conditions”, without which you effective educational and learning process is not possible. Only based on these features, the child’s development can be many-sided and his unique abilities can be revealed [1]

Many Russian and foreign representatives of progressive pedagogy paid attention to the individual approach in the problem of educating children. The great Czech educator J.A. Comenius in his pedagogical system designated the necessity of organizing the educational and upbringing process, which takes into account the age and individual characteristics of children.

However, nowadays the problem of individualization of education and upbringing remains one of the central psychological and pedagogical problems. Only the most basic and common is more or less clear: the individual approach in training is taking into account child’s individual features.

The basic contradiction of traditional teaching in infant school is associated with form of educational organization and individual character of learning.

The problem of the individual approach itself is creative, but there are some highlights in its implementation:

- Knowledge and understanding of children;
- Thorough theoretical balance;
- Ability of a teacher to reflect and analyze.

Preparing teachers to implement the technology of individual approach includes:

- Formation of ideas about wide spectrum of preschooler's individual singularities: psychophysiological, psychological, pedagogical;
- Formation of skills to diagnose preschoolers on the subject of certain individual differences.
- Development of pedagogical thinking variability, which is necessary in preparing lessons and in development of deliberately redundant sets of multitype tasks on the topic studied.

The teacher's professional level is determined by how he implements in practice the principle of the individual approach to each child. It should be considered that a teacher must not only think of the main characteristics of the children's group (their ability to perceive the material, to memorize, process and use it), but also he should know the basic principles of the individual features studying.

It is proved, that the full development of all means of speech and its core functions during the preschool years is the key to mental health and socialization of children, successful establishment of educational activity.

However, the study of psychological and pedagogic characteristics and preschoolers speech development dynamics can reveal very significant differences in children of the same age. Most often, teachers have to identify lag, delay or disruption in child's speech development.

O.A. Stepanova thinks that deviations in speech development can be divided into three groups:

- Age gaps in speech;
- Social speech disorders;
- Specific delays and speech disorders.

The causes of these disorders and speech difficulties, riding by the disorders, may lead to negative manifestations in all spheres of child's life: low cognition activity, lack of orientation in the reality, inappropriate behavior in various activities, manifestation of creativity, etc.

Such children may constitute a substantial part of underachieving pupils in primary schools.

In fact, most of these children do not apply to complex speech disorders category, and so parents visit the speech experts belatedly.

On the one hand, child and his parents are unable to cope with these problems on their own, and, on the other, child is not enrolled in a special speech group. The situation can be solved by creating the conditions for complex maintenance of a child in the kindergarten of the general types; in particular, *speech therapy centers should be opened*.

Along with the search of the new forms of speech therapy organization, there are processes of improvement the traditional and non-traditional forms, optimization of methods and content of speech correction work. All these facts allow, on the one hand, including the wide range of children in the speech correction work, and, on the other hand, using the potential or hidden reserves of correctional and pedagogic impact and making it the component of the holistic educational process.

The need for comprehensive and thorough study of the organizational and conceptual aspects of speech therapy to children, strengthen of its prophylactic aspects is an actual need nowadays and the challenge for preschool education.

The experience of preschool speech therapy center, which include the organization of speech correction help to children in kindergartens, has more than ten year-old history (S.V. Grigoryan, 1989; V.I. Selivyorstov, 1988; O.A. Stepanov, 1994, 1996 ).

This form of work, which is well-organized, has the high efficiency of corrective feedback, variety of tools and methods and plays a huge role in speech and overall child's readiness for school.

However, the study of preschool speech therapy centers shows, that along with the accumulated positive experience of their operation, speech therapists quite often forget to realize the system approach in correction of the preschoolers speech failure manifestations and individual psychophysical features of preschooler are not always taken into account. [2]

Speech therapy center activities suggest the system impact, consisting of several interconnected units (stages: diagnostic, correctional and evaluating and control.

According to the survey, each of the children can be assigned to one of the following groups [3].

*First group.* Speech development corresponds to the age of child, or violations are temporary or age-specific;

*Second group.* Speech development of a child is the subject to dynamic observations, i.e. the minor infractions appear, which require examination once a month, if necessary, children can be moved to the next group;

*Third group.* Speech development of a child needs correction; various defects are not age-appropriate;

*Fourth group.* Children need special conditions of education and training, i.e., violations are burdened by secondary disabilities.

Efficiency of solution the strategic, tactical and operational problems of correctional and educational process will depend on how well the pedagogical staff conceive the degree and nature of their own involvement in it.

In general, speech therapy work contains two kinds of successive interconnection between speech therapist and teachers: development (correction) of outmental processes and functions. It is important to bear in mind that the main work is done by a speech therapist, forming the correct primary speech skills. Preschool teachers help only at the stage of consolidation of already formed speech automatisms. At the same time teachers take the leading role in the formation of outmental processes and expand the horizons of children, provide the conditions for the preservation and maintenance of their moral and physical well-being. Distribution of functions is well established in the long-term speech therapy practice and is enshrined in preschool programs (groups) for children with speech disorders. [4]

Although the correction of speech is the additional task in the general kindergartens, teachers help in solving it.

The work of educators according to the standard program does not include the motivation of teachers for conducting and developing the means of individualization of preventive and remedial work in preschooler speech correction. Actually, the competent work of kindergarten teachers with children, who have deficiencies in speech development, may be regarded as one of the possible models of integrated speech therapy work with children.

The main purpose of this orientation should be the creation of such upbringing environment that is conducive to the fullest disclosure of potential speech-enabled pupils, prevent speech development difficulties and, if necessary, their well-time overcome. To achieve it the number of problems should be solved: diagnostic, preventive and corrective.

In practice, this orientation may be implemented in two ways: first – special tasks are included in the preschool educational program, second – the addition of general developmental goals and speech correction work on the level of individual learning as the complementary component of the educational process. It is the creation of individual programs.

Both methods can be used simultaneously. The first method is priority to children of the first and second groups, the second – to children with disabilities of speech development, which have anatomical and pathophysiological origin.

The individual approach requires from teacher the ability to work manifold and variously, to have a lot of patience and ability to understand the difficult behavior.

Diagnostic work of educator is the mean of identifying the characteristics and difficulties in child speech development, manifested in various kinds of activities. On the one hand, this makes it possible to obtain objective information on the state of knowledge and skills of children and on this basis to manage the educational process. On the other hand, it allows preschoolers with different levels of training to demonstrate their achievements. [5]

Preventive unit is considered as a set of necessary and sufficient actions, aimed at stimulating the development and improvement of the speech activity of preschool pupils in the unity of its motivational-need and operational components.

In speech correction block teacher can select multiple strategies:

- Guide parents to have the regular lessons with specialist;
- Direct parents on PMPC;
- Direct the parents to consult with a speech therapist and, in accordance with the recommendations made by him, give the speech correction support for the child. [6]

The problem of speech correction in speech therapy center is optional. It leads to the specificity of the speech therapist work. The schedule should be made thoroughly and the basic educational program should not be violated.

The main form of work on the speech therapy center is individual remedial classes, what is explained by the following reasons:

- The need to adapt to the general educational classes and daily routine;
- Different structure of pronunciation defects;
- Different level of cognitive processes development;
- Individual speed of mastering material;
- Need for several violations correction in the sounds pronunciation;



– Children's somatic weakening, entailing delays in correction process.

These and some other reasons do not allow children to organize stable subgroups for speech therapy sessions.

The speech therapist make the main emphasis on proper speech therapy and speech remedial work with preschool children. Despite significant differences in the tasks of speech correction work, primarily determined by age, speech and individual and personal characteristics of children, it is, nevertheless, based on the number of general principles, among which the priority ones are [7]:

- Individualization;
- Versatility;
- Comprehensiveness;
- Systematic character of correction and pedagogical impact.

*Individualization* of pedagogical impact can be achieved through careful dynamic study by a speech therapist of the speech disorders structure and analysis of the causes of deviations.

Versatility of speech therapy work is not only the compulsory registration of speech features, but also the account of individual and typological features of preschool children, which hinder the normal development of their speech. The laws of both general mental and speech ontogenesis should be taken into account.

For more complete disclosure of the individual approach the speech work with children is carried out during classes, in small groups, i.e., speech therapist can transfer children from one subgroup to another, due to changes in speech development.

The most important type of individual learning becomes the level differentiation. The main feature is the differentiation of the requirements for knowledge and skills of the child: mandatory training level is singled out; it sets the lower boundary of sufficient mastery of the material. This level should be available and possible to every preschooler. On its basis the elevated levels of mastering the material are formed. Children, who are in the same subgroup and have one program, receive jobs, depending on the level of assimilation, which meets their needs, interests and abilities.

Practical implementation of level differentiation should not mean that some children get the larger volume of material, and the other – smaller one. Everyone has to go through the full training process, which can not be limited to the minimum requirements. Otherwise, the level of mandatory training will not be reached.

In other words, the level of education should exceed the level of mandatory requirements. Every child should master the full volume of material and see samples of activity. And some of them will perceive these samples completely, assign them, make them as the knowledge and experience, while others do not get lost in the volume of information, and will learn from it that provides the minimum standard.

The opportunity to choose the level of achievement, in particular limit the level of mandatory requirements, will help avoiding overloading the child.

The individual form of educational activity involves self-reliant work of children on differentiated tasks. The task, built according to the individual features of the group, which was formed by the same level of knowledge and skills and level of their assimilation.

We believe that now this problem can and should be solved, as the implementation of the individual approach helps to involve all children in the activity of mastering the educational program material and is the essential condition for the successful formation of preschooler's readiness of for school.

The Convention on the Rights of the Child states: "Only the combination of age and individual approach in the education and upbringing of children can provide them with an emotional well-being and full mental development".

---

#### REFERENCES

1. Knjazeva, O. L., Mahanjova, M. D. and Sterkina R. B. (1998) *Perspektivnaja model' organizacii dejatel'nosti doskol'nogo obrazovatel'nogo uchrezhdenija*, "LINKA-PRESS" Publ., 72 p.
2. Krylova, N. L. (1978) "O preemstvennosti v rechevoj rabote vospitatelja i logopeda detskogo sada". *De-fektologija*, № 1, pp. 57–62.
3. Arefeva, Z. A. and Podobed, S. O. (2004) "Organizacija raboty logopedicheskogo punkta v DOU", *Logopediche-skaja sluzhba v DOU*, № 5, pp. 50–59.
4. Shatrova, S. A. (2012) *Korrekcija ustnoj i pismennoj rechi pervoklassnikov*, "Balass" Publ., Moscow, 207 p.
5. Stepanova, O. A. (2007) *Organizacija logopedicheskoi raboty v DOU*, "TC Sfera" Publ., Moscow, 112 p.
6. Stepanova, O. A. (2007) *Organizacija logopedicheskoi raboty v DOU*, "TC Sfera" Publ., Moscow, 112 p.
7. Stepanova, O. A. (2007) *Organizacija logopedicheskoi raboty v DOU*, "TC Sfera" Publ., Moscow, 112 p.



## INTERACTIVE EDUCATIVE METHODS IN INSTITUTIONS OF HIGHER EDUCATION AS PEDAGOGICAL INNOVATION

*ABSTRACT.* THE AUTHORS VIEWS THE INTERACTIVE FORMS AND METHODS OF TRAINING, THE PECULIARITIES OF THEIR USE, OUTCOMES AND EFFECTS OF INTERACTIVE EDUCATION.

*KEYWORDS:* INTERACTIVE EDUCATIVE METHODS, DIALOG TRAINING, INTERACTIVITY, INTERACTIVE TECHNOLOGIES.

### **MARINA GULAKOVA**

CANDIDATE OF PEDAGOGIC SCIENCES, ASSOCIATE PROFESSOR, NORTH-CAUCASUS FEDERAL UNIVERSITY

### **GALINA KHARCHENKO**

CANDIDATE OF PEDAGOGIC SCIENCES, ASSOCIATE PROFESSOR, NORTH-CAUCASUS FEDERAL UNIVERSITY

Transformations, taking place in higher education, are due to the innovative person-developing paradigm of education and the need to use intellectual and creative human potential for creative activity in all spheres of life.

One of the most important elements of the comprehensive overhaul of the higher education is the transition to the two-level system of education with the mandatory implementation of the competence approach and the credit units system. The analysis of Federal State Educational Standards and legal documents showed that the transition of the education system entails changes in the requirements to the educational process. Usage of the interactive teaching methods in the learning process is one of such requirements.

Interactive teaching methods are the essential means of successful training of students in higher educational institutions. Teaching staff nowadays should approach to the modern educational process in a different way, but not only have theoretical knowledge and give them to the audience.

Interactive methods are teaching methods, based on the interaction between the students themselves.

Interactive training is the special form of cognitive activity organization, a way of knowing, implemented in the form of joint activities of students. All the participants interact with each other, share information, solve problems, simulate situations, assess actions of themselves and the others, immersed in the real atmosphere of cooperation in solving business problems. One of the goals is the creation of comfortable learning environment, where the student feels his success, his intellectual consistency, which makes productive learning process itself.

Educational process is organized in such way that involved in the learning process, almost all students are able to understand and reflect their knowledge. The singularity of interactive methods is the mutually aimed activity of subjects, emotional and spiritual union of the participants. The interactive activity is focuses on five key elements: positive interdependence, personal responsibility, promotional interaction, collaboration and group work skills.

Compared with the traditional forms of training, roles of tutor and student changes in interactive learning: tutor's activity gives way to student's activity and tutor aims at making conditions for student's initiative.

The word 'interactive' means the ability to interact with or be in the mode of conversation, dialogue with anything (e.g., with computer) or anyone (human). Consequently, interactive learning is the dialog learning, in which the interaction takes place.

During the dialog training, students learn to think critically, solve complex problems by analyzing the circumstances and relevant information, weigh alternative opinions, make informed decisions, participate in discussions, and communicate with other people. To realize the dialog training tutor organizes pair and group work, research projects, role- playing, work with documents and various sources of information and creative work.

Student becomes the full member of the educational process, his experience is the main source of educational knowledge. The teacher does not provide ready-made knowledge, but encourages participants to independent research and serves as assistant.

Interactive forms of classes are aimed at:

- arousing students' interest;
- encouraging the active participation of all the participants in the learning process;
- appealing to the feelings of every student;

- promoting the effective mastering of educational material ;
- having the multifaceted impact on students;
- realizing the feedback (audience response);
- forming students' opinions and attitudes;
- forming life skills;
- changing behavior [1].

Training with the use of interactive educational technologies involves different logic of the educational process: training goes not from theory to practice, but from forming the new experience to its theoretical understanding through application.

T.S. Panina and L.N. Vavilov [2] single out the following general results and effects of interactive learning:

1. Interactive teaching methods can intensify the process of understanding, learning and creative application of knowledge in solving the practical problems. Efficiency is achieved, when students do not only receive, but also use knowledge "here and now". If the forms and interactive teaching methods are applied regularly then students master the productive approaches, stop fearing to make wrong assumption (because the error does not entail negative evaluation) and establish the trust relationship with the teacher.

2. Interactive learning increases motivation and involvement of participants in solving the discussed problems, which gives the emotional boost to the subsequent searching activity of participants, encourages them to make the concrete action and the learning process becomes more meaningful.

3. Interactive learning generates extraordinary ability to think extraordinary, to see the problem situation and ways of solving it, justify own position and values. It develops such traits as the ability to listen to another's point of view, the ability to cooperate, to enter into the partnership dialogue, while exercising tolerance and kindness towards one's opponents.

4. Interactive teaching methods allow transferring the ways of activities organizing, gaining new experience. Interactive activities not only increment knowledge and skills, but also disclose new abilities of students. It is the prerequisite condition for the establishment and improvement of competences through the inclusion of the participants in meaningful experience of individual and collective activity for experience gaining, perception and values acceptance.

5. The use of interactive learning technologies allows controlling the process of mastering the knowledge and the ability to apply it in different situations.

6. The result for a particular student:

- experience of active mastering the learning content in collaboration with the educational environment;
- development of personal reflection;
- development of new experience of educational interaction, experiences;
- tolerance formation.

7. The result for an educational microgroup:

- development of communication skills and interaction in a small group;
- formation of group unity value- orientation;
- encouragement of flexible changing of social roles, depending on the situation ;
- acceptance of moral norms and rules of joint activities;
- development of skills to analyze and introspect in the process of group reflection;
- development of the ability to resolve conflicts and compromise.

8. Result for the system "teacher – group":

- unconventional attitude towards the organization of the educational process;
- multidimensional development of educational material;
- formation of motivational readiness for interpersonal interaction not only in educational situations, but also in extracurricular ones.

At present time there is a large variety of interactive technologies, among which there are technology for two or three students "Aquarium", technology called "Brownian motion"; technology "The decision tree", technology "Carousel"; technology "Brainstorm", etc. All technologies are directed not only on passing the certain amount of knowledge, but also on establishing the emotional contact between students, on developing communicative skills, providing students with necessary information, without which it is impossible to implement joint activities; on working in team and listening to others' opinion.

Professional competences can be formed by the technology of self-presentation. The essence of it is to argue the position, opinion or point of view, using special means of persuasion. The technology

helps to train the student for public appearance and writing CV. Using the technology in higher educational institutions help students in the following:

- explore general and specific principles of presentation;
- master the algorithm of preparing the material for performances;
- navigate in ways and means of effective presentation;
- identify strengths, nuances and complexities of public communication;
- analyze the quality of the materials prepared for presentation.

Public appearance, which aims at announcing the author's position, can be divided into three types according to: the final results of presentation, the degree of self-interest, the breadth of the message.

Presentations of the first type are divided into informing ( have the expository character) and propulsive (directs attention to the winning side of the message, advantages and benefits).

Presentations of the second type can be personal and public, which are oriented to the statement facts, relevant to the collective point of view.

Presentations of the third type can be common and discrete. Common ones differ with versatility and diversity of information, because they are directed on the formation of the holistic view of the subject matter. Discrete presentations cover only part of the question, which focuses on student achievement of the specific goal.

The most common situations that require self-presentation are oral and written representations.

It should be remembered that the written presentations are not only CVs (resumes), but also any documents, provided to the audience, theses, reports, notices, letters, etc. Their preparation requires the certain skill, allowing focusing information in condition of limited time, achieving the best arrangement of the basic ideas and selection of arguments for understanding the audience.

Presentation includes two important aspects: content and process of realization. Together, they determine the result – achieving the goal. The aspects individually represent the technology of preparation and implementation of public appearance on practice.

Interactive technologies are closely related to information technology, distance education, use of the Internet resources, as well as the electronic textbooks and reference books, electronic notebooks, online work, etc. The level of development of the modern computer telecommunications allows engaging the participants in the interactive dialogue (written or oral) with a real partner, and enables the active exchange of messages between the user and the information system in real time.

New opportunities for interaction between participants of the educational process represent interactive classes via videoconference. Video conferencing is the technology that allows all stakeholders of the educational process to see and hear each other, share data and process them together interactively, using the capabilities of the usual computer, what makes distance communication closer to the real live communication.

Preparation and implementation of video conference depends on purpose and audience. For the successful video conference, the technical, organizational and content ional aspects must be taken into account. However, the organization of the educational process in the form of video conference imposes additional requirements for psycho-pedagogical and methodical preparation of teachers, for the level of teacher's information culture. Interactive dialogue, implemented under videoconferencing, allows transition to a qualitatively new level of teaching activity, significantly increasing its didactic, informational, methodical and technological opportunities.

Thus, the introduction of interactive teaching methods is one of the most important ways for improving students training in the modern higher educational institutions and is obligatory for the effective implementation of the competence approach.

---

#### REFERENCES

1. Kukushkin, V. S. (2005) *Teorija i metodika obucheniya*, "Feniks" Publ., Rostov on Don– Rostov, 474 p.
2. Panina, T. S. and Vavilova, L. N. (2008) *Sovremennye sposoby aktivizacii obucheniya*, "Akademiya" Publ., Moscow, 176 p.

## THE ESTIMATION OF THE LEVEL OF INNOVATIVE REGIONAL SYSTEM OF VOLGA FEDERAL DISTRICT: PROBLEMS OF REALIZATION AND DIRECTIONS OF IMPROVEMENT

**ABSTRACT.** THE AUTHOR SUGGESTS THE METHOD OF ESTIMATION OF THE INNOVATIVE REGIONAL SYSTEM LEVEL, WHICH HELPS TO GET THE COMPLEX VIEW ABOUT THE INNOVATIVE ACTIONS AT THE STAGES OF NEW KNOWLEDGE GENERATION, APPLICATION OF THE RESULTS IN THE ECONOMICS, PRODUCTION OF INNOVATIVE PRODUCTION FOR THE FINAL CONSUMER.

**KEYWORDS:** INNOVATIVE ACTIVITIES, INNOVATIVE PROCESS, PRIVATE INDICES, CONSOLIDATED INDICES, REGIONAL RESEARCHES, SOCIAL AND ECONOMIC DEVELOPMENT.

### **TATYANA SHEVCHENKO**

*SENIOR LECTURER AT THE CHAIR OF COMMON ECONOMIC DISCIPLINES, SAMARA STATE TECHNICAL UNIVERSITY, BRANCH IN SYZRAN*

In the last decade the problem of innovative activities development is urgent in the region. Due to it there are a lot of applied scientific researches, devoted to the study innovations, including the methodological questions of evaluation of innovations. At the same time, systematic evaluation of innovative processes in the region is complicated by the fact that this approach is still relatively new in the practice of the innovative activities management in the region. The most common position in the innovations evaluation in the region is the system approach as the main approach, used in the management of innovative activity at the meso- and macro- levels. Since the process approach is an evolutionary continuation of the system approach, the assessment of innovative processes (as in the system approach) should contain the comprehensive set of criteria that reflect the dynamics of innovation in the region. The evaluation of innovative processes should be universal, i.e., capable for using in each Russian region, and at the same time reflect the specifics of the individual regions. The evaluation of innovative processes must meet the requirements of accuracy and objectivity, which is possible when used with respective information.

Methodology of innovative processes evaluation has a number of serial stages [1].

1. Identifying the summarizing criteria, characterizing the innovative process in the region. These criteria shall meet the requirements of reliability, objectivity, comprehensiveness, applicability in methodological support of regional authorities decision-making.

2. Defining the private indicators, characterizing sub-processes in the region. A complex of partial indicators, which enable to evaluate the innovative process in the region, characterizes each of sub-processes. At this stage, methods for calculating the partial indicators are developed. The methods use mathematical analytical methods for integrating qualitative and quantitative characteristics of innovation processes and their dynamics.

3. Accounting of the composite indicators for assessing innovative sub-processes of the region, the composite indicator of the innovative process, allowing evaluating the relationship between the structural indicators.

Three basic approaches to the assessment the effects of social and economic development are usually used in the regional studies

- development and construction of the summary characteristics – integrated parameters, based on a set of describing indicators;
- multipurpose optimization as the definition of compromise solution of multiparametric functions, which are based on the achieving the V. Pareto principle about the optimal state of the system, where each component cannot be improved without impairing the others;
- identification of key characteristics, collectively describing the studied phenomenon with the extension of restrictive conditions on the number of describing parameters (for example, the minimum acceptable level of innovative activity of enterprises can be set).

The second and third approaches are used in mathematical modeling and require considerable array of reliable information for processing information. Since providing the information base of innovative processes there are problems of volume and some controversial points about the reliability of information, the first approach is most widely extended.

Innovative attraction gives an idea of the degree of innovative environment favorability, attention to region's innovative development from the side of the regional authorities. Based on the assessment of innovative potential attractiveness innovators both within the region and outside may decide to join the innovative business in the region. The authorities receive information on the problems that prevent innovators in getting into business innovation, based on innovation attractiveness. In the process of

innovative processes, processes of innovation system management, development of the regional innovation processes system the innovative potential of the region is formed. Functioning of the innovation system in the region materializes by the efficiency and effectiveness indexes in the innovative processes.

The researches of methodological aspects of the regional innovation sub-systems development are relevant nowadays and lot of papers are devoted to it. However, the rapid development of economy and competitive conditions contributes to changes in the qualitative and quantitative composition of the factors, influencing the formation and development of regional innovation sub-systems at different stages of economy. Development of methodology for the collection of statistical information on innovative processes, in turn, promotes the development of methodological approaches to the assessment and collection of the formation of regional innovation sub-systems. Among the studies, evaluating innovative subsystems in the region, the program "Social Atlas of Russian Regions" should be noted. In the program, the innovativeness of the regions is estimated by calculating the integral index [2]. The practice of applying the composite indices worked well thanks to its simplicity and the possibility to track the status and development of social and economic phenomena. However, the shift of innovation development paradigm and the transition from a system approach to the process one require a review of methodology of evaluation the degree of development and the degree of regional innovation sub-system development. The regional innovation system under the new conditions should be assessed from the perspective of evaluation, input conditions and effectiveness, occurring in the system of innovative processes. In the calculation of innovative attractiveness indicators, in our opinion, it is advisable to include the general and specific indicators.

In turn, the indicators of general nature can be divided into quantitative and qualitative. Quantitative indicators have numerical expression, where the source of information is the official statistical reports and collections. Qualitative indicators characterize the presence or absence of the necessary elements for the implementation of innovative processes. E.g. for the development of innovation in the region the presence of adopted strategy or program in the region is necessary. Accordingly, the presence of quality indicator is estimated at 1 point, the absence – at 0 points.

The common key indicators of innovative attractiveness gives an overview of the social and economic situation in the region from the point of view of the innovative prospects.

The proposed methodology is based on the integrated index calculation of formation and development of the regional innovation system, consisting of the following indices [ 3 ] :

- input conditions of the innovative process;
- process of knowledge generation;
- process of knowledge transformation in technologies and means of production;
- process of innovative production.

The proposed technique unlike the existing ones allows estimating the development of the innovation system by evaluating conditions of the innovative process at the entrance, which is important for a potential innovator, and also allows the state of the innovation process itself. Based on the evaluation and comparison of the data, included in the set of indicators by the regions of Russia in 2010-2011, the scale of regional innovational sub-system development was made (Table 1).

TABLE 1  
THE SCALE OF REGIONAL INNOVATIONAL SUB-SYSTEM DEVELOPMENT

<b>Group</b>	<b>Value</b>	<b>Compliance with terms of innovative development</b>
A	More than 0,6	Very high
B	От 0,45 до 0,6	High
C	От 0,35 до 0,449	Medium
D	От 0,25 до 0,349	Low
E	Less than 0,25	Very low

The results of calculations show that regional innovational sub-systems of the Volga Federal District are forming and their development is unsustainable. In 2011, the level of regional innovation sub-systems development declined slightly, and only one of the regions joined the group B (the Nizhny Novgorod region).



In 2011, the group D with an average level of the development is formed by the Republic of Tatarstan, the Samara Region, the Republic of Mordovia. The lowest level of the development among analyzed regions has the Kirov region. The proposed technique unlike existing ones allows estimating the level of the RIS development at the entrance and separate stages of innovative process. From the standpoint of potential innovator, economic situations in the regions of the Volga Federal District were not significantly different, so the input conditions index value of the innovation process have little range of deviations.

The general tendency for the regions is improving the conditions for the implementation of the innovations in the Volga Federal District, what in 2011 was caused by the increase in consumer spending, number of population with higher vocational education, stabilization of economic conditions and growth of the volume index of GRP. The problem is the general aging of the population, but it is typical for all the regions of Russia.

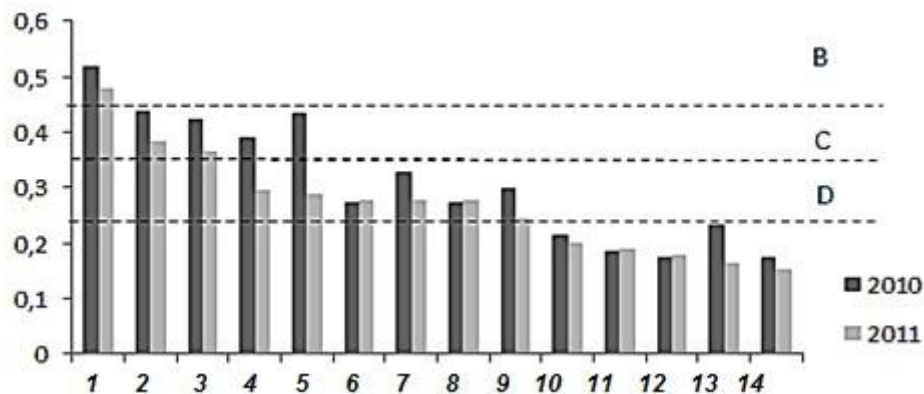


FIG. 1. THE LEVEL OF INNOVATION DEVELOPMENT IN THE VOLGA FEDERAL REGION IN 2010–2011:

1. NIZHNIY NOVGOROD REGION; 2. THE REPUBLIC OF TATARSTAN; 3. SAMARA REGION; 4. THE REPUBLIC OF MORDOVIA; 5. PERM REGION; 6. THE REPUBLIC OF BASHKORTOSTAN; 7. ULYANOV REGION; 8. THE REPUBLIC OF UDMURTIA; 9. THE REPUBLIC OF CHUVASHIA; 10. ORENBURG REGION; 11. THE REPUBLIC OF MARI EL; 12. PENZA REGION; 13. SARATOV REGION; 14. KIROV REGION.

It should be noted that the proportion of the population with higher the vocational education, in our opinion, has reached its critical value and today this fact leads to the systemic imbalances in the economy, hindering the development of high-tech industries. This conclusion is confirmed by the trend of decline of the share of people, employed in manufacturing industries. It is due to both to the lack of professional skilled workers and the general decline in the competitiveness of productions in the real sector of the economy. Reduction of scientific and technical capacity in the Russian regions caused the underdevelopment of the innovative process in the stages of knowledge generation and transferring them in new technologies and means of production. The reached level during the production of innovative products is supported by borrowing new technologies, developed outside the region and, apparently, outside Russia. Another important conclusion is high level of differentiation of the results of regional innovation sub-systems functioning that confirms the opinions of many economists about unevenness and specifics of regions in innovational activities, having unique individual character. This fact reduces the efficiency of standard approaches to management of innovative processes in the region and serves as the justification of individual approaches to the development of innovation policy. Thus, the proposed method of regional innovation subsystem development assessment allows obtaining the comprehensive understanding of innovation at the stages of generation the new knowledge, putting the results into economic activity, producing of innovative products for the consumer (Table 2).

The dynamics of the indicators, included in the scorecard RIS, allows to identify trends and problems of the region's innovation activity. The method can be useful for analyzing the development of innovational activities, for making programs and plans of innovational development, grounding the management decisions by regional authorities.

Unfortunately, currently there are not any data about the collection of the publication activities in the regional section, the estimation of citation index of by regions, what limits the performance



characteristics of the functioning of the regional innovation sub-system on the stage of knowledge generation. It is known to be not the only possible result of the research activities.

TABLE 2  
ASSESES OF DEVELOPMENT LEVEL

Region	Input conditions of the innovative process		Process of knowledge generation		Process of knowledge transformation in technologies and means of production		Process of innovative production		Innovative process		Level of innovation development	
	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011
The Republic of Bashkortostan	0,557	0,572	0,103	0,107	0,152	0,174	0,273	0,246	0,176	0,175	0,274	0,276
The Republic of Mari El	0,541	0,547	0,166	0,186	0,026	0,019	0,169	0,164	0,120	0,123	0,186	0,191
The Republic of Mordovia	0,497	0,514	0,072	0,089	0,085	0,113	0,628	0,381	0,120	0,194	0,392	0,294
The Republic of Tatarstan	0,571	0,600	0,087	0,090	0,205	0,224	0,548	0,402	0,280	0,239	0,440	0,382
The Republic of Udmurtia	0,522	0,525	0,061	0,062	0,094	0,103	0,248	0,250	0,134	0,139	0,274	0,276
The Republic of Chuvashia	0,546	0,563	0,037	0,037	0,127	0,155	0,415	0,276	0,193	0,156	0,298	0,244
Perm Region	0,559	0,586	0,089	0,069	0,207	0,208	0,542	0,267	0,279	0,181	0,435	0,287
Kirov Region	0,466	0,483	0,027	0,029	0,085	0,097	0,241	0,184	0,118	0,103	0,173	0,153
Nizhniy Novgorod Region	0,558	0,563	0,112	0,122	0,416	0,378	0,473	0,416	0,334	0,306	0,520	0,477
Orenburg Region	0,474	0,488	0,097	0,116	0,079	0,044	0,261	0,244	0,146	0,135	0,215	0,200
Penza Region	0,501	0,539	0,053	0,028	0,066	0,097	0,231	0,220	0,117	0,115	0,175	0,177
Samara Region	0,627	0,614	0,069	0,067	0,234	0,275	0,476	0,337	0,259	0,226	0,422	0,365
Saratov Region	0,484	0,526	0,106	0,105	0,132	0,123	0,235	0,097	0,158	0,108	0,234	0,165
Ulyanov Region	0,542	0,550	0,052	0,068	0,104	0,173	0,482	0,293	0,213	0,178	0,328	0,276

#### REFERENCES

1. Hmeleva, G. A. and Ioda, E. V. (2012) "Predposylki processnoj modeli formirovaniya innovacionnoi ekonomiki v regione". *Socialno-ekonomicheskie yavleniya i processi*, №5–6.
2. *Programma «Socialnyi atlas rossiiskih regionov»*. Available at: [http://atlas.socpol.ru/indexes/index\\_innov.shtml](http://atlas.socpol.ru/indexes/index_innov.shtml) (assessed at 13.01.2014).
3. Hmeleva, G. A. "Ocenka differenciacii regionov po urovnyu innovacionnogo razvitiya". *Upravlenie jekonomicheskimi sistemami*, № 6, 0421200034. Available at: [www.uecs.ru](http://www.uecs.ru). (assessed at 13.01.2014).

### THE DEVELOPMENT OF GRAFFITI CINEMATIC DRAMATURGY

**ABSTRACT.** THE ARTICLE IS DEVOTED TO GRAFFITI. THE AUTHORS DISCUSS THE PREREQUISITES FOR THE RISE AND DEVELOPMENT OF THE DYNAMIC NATURE OF GRAFFITI CULTURE AND THE INFLUENCE OF CINEMA ON IT. AS THE RESULT OF THE ANALYSIS, THE AUTHORS CONCLUDE THAT THE CINEMATIC FEATURES IN THE ART OF MODERN GRAFFITI APPEAR ON THE DRAMATIC LEVEL, COMPOSITIONAL TECHNIQUES AND SCHEMES, SHAPED AND TECHNICAL SOLUTIONS, AND THAT THE EVOLUTION OF GRAFFITI HAVE GENERATED THE EMERGENCE OF NEW AUDIO-VISUAL CREATIVE DIRECTIONS.

**KEYWORDS:** WRITING, CINEMATIC LANGUAGE GRAFFITI, HUMAN-GRAFFITI, 3D STREET PAINTING, VIDEO MAPPING, GRAFFITI PROJECTION, LASER ANIMATION.

#### **ELENA SKORIK**

TEACHER OF FINE ARTS, HIGHER QUALIFICATION, SCHOOL №109

#### **ALEXANDER SKORIK**

HEAD OF THE «POST-PRODUCTION» DEPARTMENT

Graffiti is one of the most common forms of artistic expressions worldwide. It began with primitive men wall paintings and continued with frescoes in cathedrals and temples, but it became especially actual and creative in our time. The problem of modern graffiti, its forms and kinds are specified in scientific literature, but the authors of the article attempt to explore the positive side of the phenomenon in terms of its cinematic manifestations. The main purpose of the research is to analyze the evolution of modern graffiti culture as the art alternative to cinematic sphere, to describe the interaction effect of these kinds of art on each other, to consider graffiti as a precursor of new audiovisual creative directions.

The modern history of graffiti began in the early XX century, when New York subway and freight trains drawings appeared. Silent films with its advertisements, posters and flyers (what was the new

way of expression) greatly influenced on graffiti formation. In the 1900s, the common type in posters decoration was constructivism, which later became the dominant graffiti style. Like posters, the drawings of artists (or graffitists) became framed and bordered; they contained the different in scale, design and character; the decorative color scheme complicated.

In the 20-ies of the last century writers' pictures on the walls and trade or passengers trains could probably stimulated the Dadaists artists (members of the group "Dada") to challenge the traditional creativity. Experimenting in the movies, they created films, scratched or painted directly on film, which were a kind of cinema graffiti. Among them was the artist, photographer and director M. Ray. He is the author of such films as "Le Retour à la Raison" (1923), " L'Étoile de mer" (1928). In future, painting movie frames manually became boldly introduced in black and white versions of cinema. First the certain parts of the frames were stained to create special effects ("Battleship Potemkin" dir. Eisenstein, 1925, "Phantom of the Opera" dir. R. Julian, 1925) , and then monochrome filmstrips became colored. With the improvement of computer technologies colorization of old movies was widely spread throughout the world. But the films, which were the result of colorization, in fact, represent the other kind of movies. Hence the relevance to colorization of films is similar to vandalism recalls related to graffiti, at its discretion, changing the architectural aesthetics of streets, underground transitions, external and internal design of transport.

There are many types and styles of graffiti: static and dynamic. From the cinematography point of view, dynamic style is more interesting. It is usually drawn at the vehicles: trains, buses, cars, planes. Industrial and technical equipment of graffiti arias helped the graffitists to make their art more dynamic, making it similar to the rhythms breakdance, hip-hop and other developing subcultures as skateboard, snowboard and parkour. People, standing at the platform, see the passing painted trains and associate them with a film, where there are frames-train cars, titles-labels, characters and audio support (natural noises, urban cadences, rhythmic sound of the wheels). You can contemplate either from the windows of transport, if there are painted urban areas or concrete barriers along the route. Painted high-speed transport also serves as means of rolling pictures – you can see them in different regions and cities.

Graffiti, like all youth subcultures, is divided into constructive and destructive forms, where "constructive form" promotes personal growth and creative potential of the individuals and "destructive form" is adolescence form, based on the manifestation of deviant behavior, destructive self-realization. S. Freud was one of the first, who tried to see the need for self-realization in dominant instincts of human. For Freud "Self-realization is localized in the unconscious layer of human mind and is manifested in the "pursuit of pleasure", inherent in man from birth. The need for self-realization is an existential need and mental state, eternal and unchanging in its basis. Social conditions can change only ways to satisfy it: it can find a way in creativity and destruction, love and crime, etc." [1]. Of course, we are interested in the constructive form of graffiti. However, in the history of art, there are some examples, when the great artists such as Raphael, Michelangelo or Ghirlandaio carved their names on the walls. Often youth "barbarian" outlines lead their authors in the world of fine art, where they reached the highest tops of their skills. Young I. Aivazovskiy made his first pictures on the whitewashed walls of the houses in Feodosia, for which he received numerous thrashing. In early years, S. Dali left sketches on tables, scratching the paint of the smooth surface. Besides, scratching was the technique, mastered by classical watercolorist and impressionists. Scraping of dye layers to the soil gave up the variety, softness and lightness of paintings. In the middle of the twentieth century, "grattage" (from the French "grater", which means to scratch) is scratching a cardboard, covered wax, gouache or ink, with a sharp tool, became an independent non-traditional way of drawing.

Dynamics of graffiti is genetically incorporated in this phenomenon, initially suffering from vandalism, marking areas and art unprofessionalism. With the development of content and the improvement of technique, graffiti moved to a new stage of communication, of expressing own opinions and ideas. The dramaturgy of exclusive images and interesting characters are arising and the levels of skills and styles are increasing. Graffiti evolves, gaining popularity, and writers' contexts find freedom. The accents go to the color-forming elements, which are built into the complex aesthetically oriented configuration, acquiring new artistic susceptibility. Authoritative fine community seriously views the constructive graffiti and considers it an integral part of art culture.

The most famous modern writer in the world Banksy makes megalopolises in exhibition areas, workshops and galleries. His provocative socially relevant art objects are documents of latest news about politics, incidents in the world and interesting observations. Banksy works at nights, hiding from the eyes, so he works fast. His silhouette graphics is made with the prepared stencils and

sprays or with the aid of images, projected on the walls. This technique does not require a lot of time, careful study or financial costs. It is possible that under the brand name "Banksy" is hiding the whole corporation, as the art studio of Andy Warhol, uniting the determined staff. The works have the audio-records, commenting the meaning of images. They can be heard by dialing phone number, which is left near the picture as an autograph. Street-art in silent execution goes into sound one, as if silent movies, in its time, gave way to sound films.

Cinematic art, which catalyzed graffiti, shows itself the interest to graffiti, produces films about the legendary representatives ("Wild Style" dir. Ehern Charles, 1983 ; "Beet Street" dir. S. Lathan, 1984, "Quality of life "dir. B. Morgan, 2004), uses writers basis in titles and animations. In turn, graffitiists depict heroes of movies, television productions and cartoons, use semantic titration sequence. Cinematographic language of graffiti consists of verbal text and paraverbal appointment (symbols, illustrations, images). Authorship is important for graffitiists; their font is full of "tags" – autographs and logos. Cinematography is also full of directors' autographs, when directors themselves appear on the screen, usually in supporting roles. Currently creative ideas in a static wall art began to form the illusion of movement as a natural transition from one stage to another – creation, existence and disappearance of urban exterior image. For this purpose, easily removable impermanent paints are used. The aim to give the cinematic effect (space-time continuum ) to works justifies the use of fragile artistic material. Artist H. Rodriguez Gerada created on the facades of houses scale portraits of people. They are short-lived, ephemeral, easily washed off by rain, and this is their philosophical destination. Formation of the picture, short period of its existence, natural modifications, which are made in passers-by (viewer) presence, all this is a lot like watching slowly removing film, with its beginning and end. However, to keep the track in history, all the stages of transformation are documented on the photo or film. The similar kind of graffiti is made on the beach sand. These fragile creations emphasize that everything has short living – the old forms are destroyed to be replaced by the new ones, much more improved – and everything has perpetual motion. The artist A. Amador create large-scaled beach patterns at low tide by loosening sand. The result is the contrast between the loosened damp surface and pristine dry one. Tidal wave washes the image and you can start another drawing. All this reminds sand animation in monumental form, and slow conversion from one image to another makes this art a highly creative dramatic expression. In this type of graffiti the static form is transformed into dynamic one. Another kind of dynamic graffiti is body art, which differs only with the other art surface. Compositions on the underway human body demonstrate the content of "live" pictures to the audience in changing angles, transformations of outlines. Body painters often perform unique font theme on conditional brick walls. All this (and also the wall) is the creative context on the human format, a kind of human-graffiti. As we see, this industry of "beauty" has the same movie screen base – creation of spatial and temporal changes on plane.

Powerful element of modern entertainment industry is computers. Digital technologies have not only contributed to an unlimited development of filmmaking, but also provoked the emergence of computer graphics in art and the computer writing became the part of it. When the virtual "walls" of "boards" appeared in the Internet, graffiti elements also appeared there. People began to create lettering and nominal phrases-pictures, referring to them on the pages of the online forums. "This kind of art is called ASCII Art. Masterpieces of the genre can be seen on special websites or on a floppy framework of a computer program, and video games" [2]. In plots of some video games, graffiti characters come to life and become the main characters of gameplay dramatic element. Dynamics of writers' incarnations was realized in explicit dimensional form.

Stereo 3D movies have become one of the main trends in cinematography, animation and advertising. Movies in three-dimensional format made counterparts of painting and drawing. In 1982, the artist Kurt Wenner created a new form of street art «3D street painting». Fine art, having made the jump, reached the new level. For the depth of experience, increasing the scopes of pictorial plane to the size of streets, squares and parks, graffitiists began to create three-dimensional figures in two-dimensional space on the pavement. In this case, cinematographic effect is also presented – the change perspective on the iconic object leads to destruction of the illusion of reality. Circular dynamic display of works creates its progressive form, accentuates and destruction. The artist Kim Joon invented first volume body painting projects. Installations of moving twisted human bodies, painted with patterns, against the background of flat surface or carpet, define a new dynamic 3D style of graffiti. Now, fully mastered unconventional territories such as, asphalt, cars, human bodies, graffiti artists moved to the galleries, where 3D paintings are not limited by the perimeter of work and the image boldly spills over the frames. At the exhibition of 3D paintings "Magic Art Special Exhibition

Of China”, held in 2012 in Hangzhou, spectators were involved in volume paintings, so the illusion of mandatory presence in the plots was made by the authors. Immediate real actors became the logical continuation of fine stories.

Thus, cinematic manifestations in different types and directions of writers art scenarios evolve. Recently, armed with laser and projection plants, graffiti again changes its expressive form, but the content remains the same dynamic creative art on the plane, like the screen one. Colorful geometry of laser animation creates pictures on all surfaces: on special mesh screens on the walls, on smoke or on the water surface. 3D- mapping (interactive video projection of image on real objects) takes into account the architectural features of buildings, activates and includes structural elements in light show, making them integral to its active component. This wall writing completely transformed into a cinematic mapping or graffiti projection, survived digital reincarnation and became the trend in show business, advertising, theaters and concerts. In some experimental scenarios of color shows with interactive devices viewers become the part of the art objects, interact with them, immerse in the process of creating the product of the surrounding space. Therefore, in 2011 the system of combining volume laser animation with video projection produced a universal 3Dmultimedia show – the large-scale spatial installation. Most likely, in the nearest future, cinematography, which is yet screen art, will gain this kind of format.

Summarizing, we would like to note that this article is graffiti is represented not as an isolated phenomenon in contemporary art, but is characterized in the context of different levels of cinematic development. Moreover, in this connection let us consider how its cinematic nature with the development of digital and laser technologies became the forerunner of new audiovisual creative directions of alternative cinema.

#### REFERENCES

1. Mihailov, N. N.(1982) “O potrebnosti lichnosti v samorealizacii. Nauchnyj doklad vysshej shkoly”. *Filosofskie nauki*, № 4, p. 24.
2. Voronova, E. *Iskusstvo graffiti*. Available at: [www.bestreferat.ru/referat-193603.html](http://www.bestreferat.ru/referat-193603.html) (accessed at 10.01.2014).

#### ATTITUDE OF INDUSTRIAL ENTERPRISES EMPLOYEES TO INNOVATIONS

**ABSTRACT.** THE PAPER PRESENTS AN ANALYSIS OF ATTITUDES TO INNOVATIONS, INNOVATIONS IN MODERN RUSSIAN INDUSTRIAL ENTERPRISES, CARRIED OUT WITHIN THE FRAMEWORK OF SOCIOLOGICAL RESEARCH ON STAFF TRAINING AS A FACTOR OF INNOVATIVE ACTIVITY OF INDUSTRIAL ENTERPRISES.

**KEYWORDS:** INNOVATION, INDUSTRIAL ENTERPRISE, VOCATIONAL TRAINING, PERSONNEL.

#### **EVGENIA ZHELNINA**

CANDIDATE OF SOCIOLOGICAL SCIENCES, ASSOCIATE PROFESSOR, TOLYATTI STATE UNIVERSITY

#### **OLEG ZHELNIN**

ENGINEER, VOLGA MECHANICAL PLANT

Due to increased demand on various innovation in modern Russia (the innovations of new technologies, products and services, control systems, interaction and communication upgrades), we considered it necessary to study this phenomenon (innovation and innovative) both in terms of theory and methodology, and empirically [1, p. 37]. Consequently, the aim of this paper is to present the results and conclusions of this study.

The authors involved 400 respondents in the empirical sociological study. All of them are the employees of 70 industrial enterprises of the Volga Federal District. 16 cities took part in the survey: Dimitrovgrad, Zavolzhsky, Izhevsk, Kazan, Naberezhnye Chelny, Neftekamsk, Nizhny Novgorod, Orenburg, Ryazan, Salavat, Samara, Solikamsk, Sizran, Tolyatti, Ulyanovsk, Ufa, and Cheboksary. Among the surveyed enterprises prevails big business (81 %).

During the analysis of the data, it was revealed that in top and senior management there are people with the higher education (100%). Six middle managers from seven trained in higher educational institution. In addition, half of line managers also have a diploma of higher education. These figures allow us to make a conclusion that the appointment to the executive position in modern Russia must be preceded by receiving a diploma of higher professional education and the specialization does not matter.



This conclusion is confirmed by the fact that about 25% of the experts, having worked for some time, decided to study at universities by correspondence. Every fourth of professionals in the process of labor activities concluded that university degree is required for a successful career growth in modern conditions.

Slightly more than half of respondents (51%) consider the company not only as a job, but as an opportunity of friendly relationship. It is important to note that this figure dominates among employees of industrial divisions. About one-third of respondents (29%) within the enterprise implement their own meaningful vocational goals. Moreover, among the administrative personnel of the enterprise this figure is much higher (37%). Only 19% of respondents do not allow personal contacts at work. Summarizing, we can say that the majority of respondents has an active social and professional position within selected industrial enterprise. Moreover, the representatives of manufacturing units of the company in most cases focus on communication, cooperation and teamwork. While representatives of managerial staff focus on implementing personal career plans.

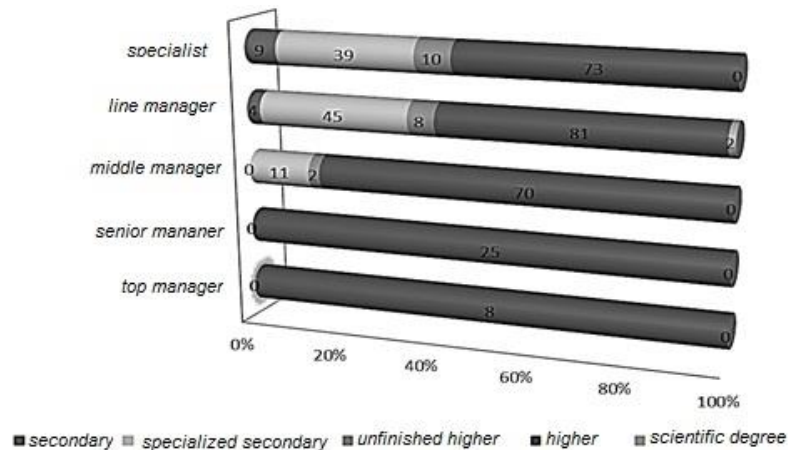


FIG. 1. RATIO OF POST TO EDUCATION

About 50% of respondents rated the economic condition of own enterprise as a good one; third of them (34%) – as satisfactory; 7% – as bad and only 4% – as excellent. 7% of respondents found it difficult to assess the performance of their company, and 80% of them have technical education and 70% of them work in manufacturing sector. These data clearly show that intersection of specialty areas is not accepted in modern Russian industrial enterprises. In our opinion, this is a serious obstacle to an active innovation policy of the company, because there is no adequate exchange of information between the departments.

On the issue of innovation policy most respondents (90%) indicated that innovations in the company are taking place, but with varying degrees of intensity (Fig. 2).

Only 8% of respondents said that the company is working on tuned technology and innovation are not allowed. On closer examination of the data (Fig. 3) it can be noted that small and medium businesses more inclined to different kind innovations, while large companies either actively working with innovation, or completely reject them in their activities.

Some differences in the evaluation of enterprise innovation activity can be identified with respect to the branch, where the employee works. For example, administrative staff in the greater degree indicates its company in terms of innovation, and nobody of them has chosen the answer "no, we use the adjusted technology".



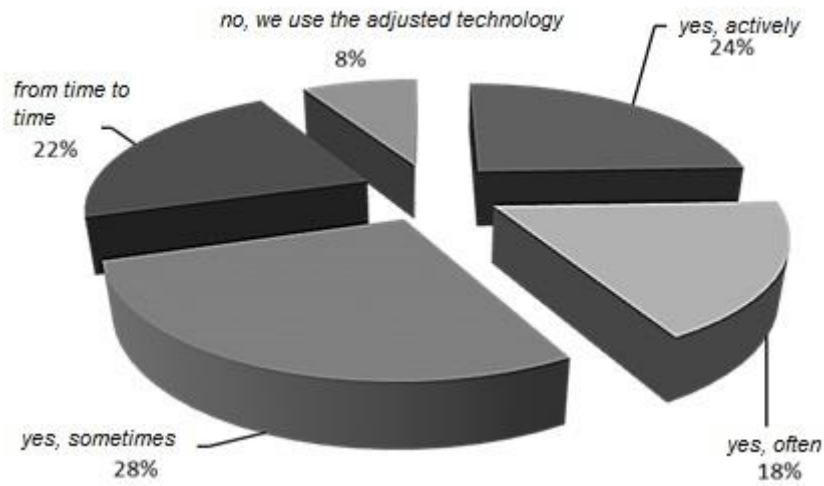


FIG. 2. INNOVATION IMPLEMENTATION ON ENTERPRISE (ACCORDING TO STAFF OPINION)

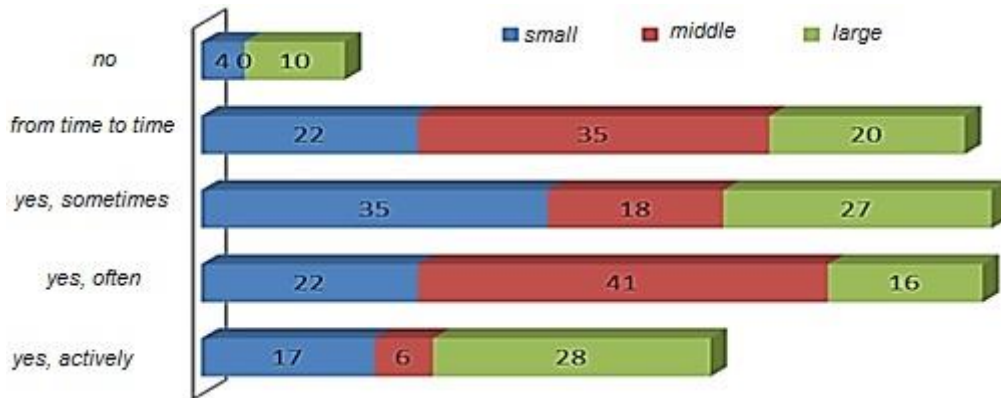


FIG. 3. INTENSITY OF INNOVATION IMPLEMENTATION, DEPENDING ON THE SIZE OF ENTERPRISE

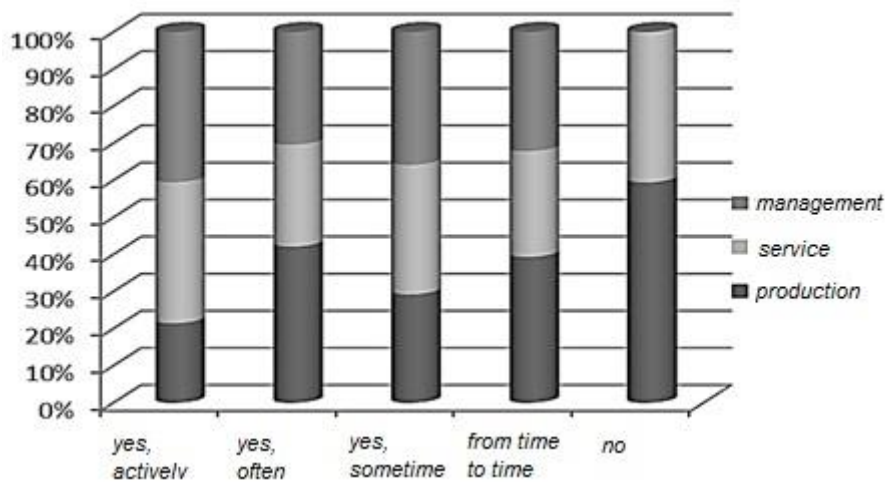


FIG. 4. INTENSITY OF INNOVATION IMPLEMENTATION, DEPENDING ON THE BRANCH

Along with opinion to innovations, we tried to find out what ways of changing the negative attitudes towards innovation exist. The result was the following rating: information (26%), education (26%),

mentor-operation (15%), personal example of a significant person (12%), belief (9%), coercion or sanctions (5%), bonuses (just over 1%). This rating ways shows the average data. We have identified some of the features (although they are not very significantly – the overall trend remains the same) for age, record of service and the role of the worker in organization. For example, for respondents under the age of 24 years on the first place in this ranking is learning (23%), which in general coincides with the main activity of a person in this age period. The importance of training for people over 60 years (42%) can be attributed to their low adaptation to rapidly changing environmental conditions and the complexity of mastering the technology work independently. As for the distribution of these methods with respect of service, mentoring is the most important for the group of respondents with less than 1 year respect (36%). Furthermore, the group with average length of service (10 to 24 years) shows the resistance of their professional beliefs. These professionals will refrain in their positions, which can be the least changed with bonuses, although information is the best way to eliminate negative feelings about innovation in this category of respondents.

Undoubtedly, the most significant cause of innovation is economic results. This is the large group, including improving product quality (13%), increasing the efficiency of work (13%), cost reduction (4%), improving the competitiveness of enterprises and products (16%), expansion of enterprise activity on the market (9%), and optimization of staff the (1%). The second place on the importance occupies the social group of results: socio-psychological (15%) - skills development, adaptation, overcoming feeling of inevitability of change, and socio-economic (2%).

The main purpose of this study was to determine the sociological impact of corporate training at innovation activity of the modern Russian industrial enterprises.

The answer was received after the analysis of respondents' answers to the question of existing ways to change the negative attitude of employees. The result was the following rating information (26%), education (26%), mentoring (15%), personal example of a significant person (12%), belief (9%), coercion and sanctions (5%) and last turned bonuses (just over 1%). Obviously, working at the enterprise system of corporate training personnel is capable to ensure the search processes, evaluation and innovation activities to be necessary activities.

Thus, it can be noted that there is the good attitude to innovations in modern Russian industrial enterprises and there are innovative processes at the production, but with different pace and different intensity.

#### REFERENECES

1. Andreeva, A. L. (2013) "Vozmozhnosti innovacionnoi modernizacii Rossii glazami raznyh pokolenii nauchno-tehnicheskoi intelligencii". *Sociologicheskie issledovaniya*, № 4, pp. 35–41.

#### APPROACHES TO "YOUTH" CATEGORY DEFINITION

**ABSTRACT.** THE ARTICLE IS DEVOTED TO THE THEORETICAL UNDERSTANDING OF THE CATEGORY "YOUTH" IN THE CONTEXT OF SOCIOLOGICAL ANALYSIS. THE AUTHOR DISCUSSES THE HISTORICAL STAGES OF "YOUTH" CATEGORY IN SCIENCE AND ANALYZES THE SOCIOLOGICAL CONCEPTS OF YOUTH. **KEYWORDS:** YOUTH, SOCIALIZATION, SOCIAL ADAPTATION, SOCIOLOGY OF YOUTH.

#### **VLADIMIR ZAGREBIN**

PHD STUDENT, NIZHNIY NOVGOROD STATE UNIVERSITY NAMED BY N. I. LOBACHEVSKY

Young people as an integral part of modern society is subject of study for various social and humanity sciences, in particular, within the demographics, political science, philosophy, pedagogy, psychology, sociology, etc. This leads to the fact that the concept of "youth" has broad meaning.

In sociology, youth is defined as a social group, which occupies a special position in society. In studies, the great attention is paid to social relations, in which young people enter, the process of socialization of young people, features of youth subculture, their social status. However, some sociologists go away from direct definition of "youth", preferring to reveal the essence of the concept "youth culture" and "teenagers" through the complex of features, as a system of values, ways of behavior and lifestyles, peculiar to small, socially marginalized communities of young people. To clarify the concept of "youth" we consider the basic sociological concepts and approaches.

In Russian literature, one of the first attempts to allocate a special social group called "youth" appeared in the 1960s. V.T. Lisowski defined it as follows: "Youth is a generation of people passing the stage of socialization, acquiring, and in adulthood already mastered, educational, cultural and social functions; depending on the particular historical conditions youth age criteria may vary from 16

to 30 years " [1, p. 48]. Later, J.S. Cohn gave the most complete definition: "Youth is social and demographic group, allocated on the basis of the aggregate of the age characteristics, characteristics of the social situation and social and psychological characteristics. Youth as the definite phase, lifecycle stage is biologically universal, but its specific age range, social status and social and psychological characteristics have social and historical nature and depend on the social system, culture and specific to the society laws of socialization" [2, p. 85].

From the standpoint of V.Y. Surtaeva "Youth is a social age group of young people (sometimes up to 30 years), on the one hand, they carry the result of various factors and ,in general, they are formed personalities, and ,on the other hand, their values remain flexible, undergoing personal influences. Experience of this group is not rich, perceptions of moral and ethical values are often not fully defined" [3, p. 152].

There is no clear definition of the term "youth" in sociological dictionaries. For example, in "Concise Dictionary of Sociology," edited by D.M. Gvishiani and N.I. Lapin "youth" is characterized as "socio-demographic group, passing the period of social maturity formation, entering into adult world, adapting and renewing in future. The group is undergoing through an important stage of familial and extra-familial socialization, internalization of norms and values, folding social and professional expectations, roles and statuses, which are reflected in the special youth behaviors and consciousness in terms of youth subculture, etc. The borders of group are blurred and mobile, but they are usually associated with the age 15-30 years" [4, p. 480]. In the dictionary, edited by V. Osipov and L.N. Moskvicheva "youth" is considered as a large public group with specific social and psychological features, which can be determined as the age characteristics of young people; their socio-economic and socio-political situations, their spiritual world are in state of formation. Statistics and sociology determine the age range of young people from 16 to 30 years. However, the social heterogeneity of youth has led some researchers to identify its "upper" age limit depending on the duration of the formation of socio-economic and professional qualities of its various groups. Social sphere of youth is a model class youth class structure of a particular society. Young people is the most mobile part of society, providing the active influence on the dynamics of social structure, changes in class and layer structure of the population [5, p. 280].

Several researchers linked the border of youth age with labor activities. A.E. Kotlyar [6] defines the lower boundary as "open access to the labor activity" and the top boundary as "the achievement of employment and social stability". Under labor and social stability the author means the availability of education, work, economic independence, professional self-determination, family creation, separate housing from parents, birth of children, etc.

There is no doubt that young people as a socio-demographic group is a part of society and inseparable from it. Moreover, the nature of age and socio-psychological characteristics, specific interests and needs of young people are socially conditioned, and they can be specifically interpreted only within the broader social context. However, the fundamental aspects of sociological definition of youth the researchers consistently mark age boundaries, socio- psychological characteristics, specificity of social status, roles, socio-cultural behavior, the process of socialization as a unity of social adaptation of youth and individualization.

Based on the analysis of various definitions of youth, Russian sociologists offer a universal definition of the term, which is synthesized by the sociological and demographic approaches. "Youth is the socio-demographic, age group ranging from 14 to 30 years, passing the step of socialization, characterized by lack of complete list of the main features of social defining adult status (education, work, profession, housing, family)" [7, p. 55]. According to B.A. Ruchkin, youth age is rather difficult to consider, as a complete object of study as social functions performed by individuals at the beginning and end of the stage, are essentially different. He offers the study of the process of socialization of youth to distinguish the following periods: teens – up to 18 years, young people – 18-24, young adults – 25-30 [8].

In forecasting the development of any region or a country as a whole, as a rule, young people occupies a key position, being the major mobilization resource of society, the generation determining the future of the state. Therefore, in the last decade researches of youth are very popular as a social resource and youth development.

In the resource approach, youth is often considered as age cohort of 18 to 30 years. Considering the fact that in modern society the process of professional training, which at all times was considered as the period of preparation for the "adult" life, becomes almost continuous and very long-lasting process, and the state of youth becomes more extended in time. This trend of some "infantilization"

and even "marginalization" is gradually spread not only in the professional sphere, but also in the of marital and family relations. Young people have longer determinations and formations in profession, much later (in comparison with their parents) enter into formal marriage and have children. This, in particular, is reflected in the fact that some national youth projects extend the period of youth, considering as representatives of young generation under the age of 35 years. Therefore, some scientists believe young generation as people in the age from 18 to 35 years [9].

Because this age group in terms of age and social problems is very heterogeneous, it conditionally divided into three age groups, different in their social status. Age group of 18-24 years, as a rule, is represented by students. Main tasks of this age are vocational self-determination, professional socialization, civil, legal, social, economic responsibility and independence. It is the period, in which educational and qualification prerequisites of human potential form and/or social, personal, economic, etc. prerequisites devel. At the same time, it is the least resourcing youth category: it has no high social position of vocational education, job skills, personal maturity and experience, social ("bonds", family, etc.), economic and other resources.

Age group of 25-30 years is mainly represented by young professionals, who have attempted to occupy a certain place in the labor market, earn professional experience, establish itself as a professional, gain independence in profession (professions), obtain additional education or qualification, lay the foundations of career, etc. In this age it is necessary to determine the family life, have children; finally become economically and socially self-reliant; become personally mature, form certain life aspirations and plans.

Group in the age range of 30-35 years applies in some periodization to the development of early adulthood. In the most part it is quite experienced people, having a certain length of service, gaining independence in the profession, some of them are already making significant career steps. In social terms they are people with certain civil and personal attitudes, responsible for family and education of their children. On the one hand, theoretically, in this period, young people already have many resources (social, economic, political, qualificational, personal, etc.), allowing them to realize themselves in various fields. On the other hand, in a very non-grained socio-economic reality of Russian life, young people of this age and above often have to survive and "exist" in constant "voltage" of existing and/or necessary resources. [10]

In general, it should be noted that social youth groups difference not only by socio-demographic criteria, but also on special social and socio-cultural characteristics. Thus, the researchers argue that modern Russian youth differ not in age singularities, but in accruing socio-economic singularities: as by welfare and socio-behavior, identification, socialization, adaptation and other characteristics [ 11].

In recent years researchers offer thesaurus concept of youth and define youth as a social group, which are (1) people, mastering and appropriating social subjectivity and their social status is young, and (2) common thesauruses in this social group (3) and by expressing and reflecting their symbolic and subject world.

Thesaurus youth concept is built on the foundation of social subjects and seeks to clarify the way of appropriation by revealing its contradictory traits in objectified activity and in the facts of consciousness, having an important regulatory function. General scheme of constructing social reality of young people includes 3 stages:

(1) Adaptation to environmental conditions (trials and mistakes; recognition environment and rules; behavior change in accordance with the rules, understanding and legitimation of the environment through "ours");

(2) Building the reality (symbolization through ideal "good" and "evil", construction of the symbolic universe, compensation for inaccessible, action to shield "their world" selection zone of independence);

(3) Restructuring of environmental conditions (ignoring unimportant; changing proportions and combination in accordance with the thesaurus, the action is "your world" in accordance with its symbolic universe).

These positions can be realized as the actual result of vital activity and as the result of the project realization [12].

Within the thesaurus concept youth is treated as property of the person, which is not only based on indicators of biological age as a period of puberty, physical and mental readiness. Social status of the young person more or less can be correlated with biological characteristics, but with considerable autonomy and backlash, especially manifested in certain situations and events. Thus,



V.A. Lukov [13] observes that youth has signs of social groups in the degree, in which the company for a given level of social relations and according to the requirements, putting forward by culture, designs them. Such constructs is carried out in accordance with the nature of human societies, but on the certain stages of development acquires supernatural features, implemented through the system of social institutions. Youth appears to society not as a certain set of young people, but as an ordered social structure with the expected (standard lockable) properties, which, in practice, reflect the development of a specific group of social institutions. Institutions have autonomy within society as a whole, and this gives the specific traits of its time.

Exploring a sociological category of "youth" is inextricably linked to the process of socialization. Concept of socialization is extremely wide, it includes the processes and results of the formation and development of personality. Socialization is the process and the result of the dialectical interaction between the individual and the society, the occurrence and "implementation" of the individual in the social structure by socially desirable qualities [ 14].

The socialization process is mainly determined by the functioning of the socializing institutions and due to their urgent need for effective implementation of the transfer of social experience. The person does not only learn the social experience, but also converts it. Expectations, behavior change and the desire to meet these expectations are necessary For successful socialization.

I.V. Solodnikova [15] proposes to combine two blocks of socio-psychological factors of socialization. Social factors reflecting the socio-cultural dimension (set of roles and statuses offered to a human society , a set of social institutions in which it can shape their social skills, etc.) and individual and personal, largely defining the stages of person's life (selectivity of the individual in the development of patterns of behavior, activities, manifestation of gender-specific broadcast a particular society).

Socialization is primarily divided into primary and secondary.

Primary socialization covers the period of childhood and occurs in communication with family, informal groups. Here the main agents of socialization are smiling parents, teachers, and contemporaries. The mechanism of primary socialization involves learning the language, as well as binary oppositions are presented, which are based on interpretive schemes – "good and bad", "may and may not", and so on. The generalization of these models allows a child to learn the role, which adults offers to him. Along with the role, he internalizes the values and attitudes of adults, expanding the stock of knowledge and its social constructs "I", possible only in a world that gave him the adults [16].

Secondary socialization is carried out in formal groups, it exist with formal control and formal sanctions. In this case, social institutions (school, college, military, etc.), teachers, coaches, mentors, and bosses operate the function of socialization agents. Another important factor, influencing of teens, is the media. In modern conditions television and especially the Internet affect the minds of children, and in particular communication through social networks.

The question of where primary socialization ends and secondary socialization begins is ambiguous. Berger and Luckman determine secondary socialization as "the acquisition of role-specific knowledge, when role directly or indirectly are related to the division of labor", "internalization of institutional or institutionally grounded sub-worlds" [17]. Many researchers argue that the secondary socialization begins with school. [18]

Socialization process flows through all human life. Changing social situation and adapting to the new status, occurring in adulthood, learning new values and roles for replacing previously learned enough or inappropriate to new situation ones, should be defined by the term "re-socialization". According to one of the American sociological dictionaries "re-socialization is part of the socialization process that occurs during the whole life and includes assimilation of previously not encountered adult roles" [19]. Re-socialization can manifest itself in any form: remedial classes in reading skills retraining or vocational re-training of people, which jobs were reduced by computers or changing economic conditions.

Summarizing, we can draw the following conclusions. Based on considered point of view of Russian and foreign researchers, in our analysis define "youth" as "socio-demographic group, consisting of individuals with young social status and young at self-identity, with character for their age and social-psychological characteristics and social values, which are determined by the level of socio-economic and cultural development, features of socialization in Russian society.

Thus, there are many approaches to the study of the phenomenon of youth, which is determined according to every single research. Youth as a cultural constant has a special character, since it is



associated with expectation of change. In society such expectations are twofold: the expectations-fears, as social order is conservative and has the protective mechanisms of innovation, including youth. However, the concept of "youth" is key in the analysis of a number of social events such as youth deviation (alcoholism, drug addiction, crime, etc.).

We again emphasize the factors affecting socialization – family, school, friends, the media, social and sports organization. Each of these factors complements the other and at the same time provides individual influence on the process of socialization.

Despite the presence of influence channels on socialization, it is not always successfully. Children resist and change the process of socialization in many stages of development. Sometimes there is a complete failure. It can take many forms: from eccentricity to open resistance and protest against the values and norms of society. In fact, such failure of socialization can serve as a basis for social change in subsequent generations. In the modern Russian society, there is social exclusion of young people, who express their protest in various forms of deviant behavior.

---

#### REFERENCES

1. Lisovskii, V.T. (1990) *Sovetskoe studenchestvo. Sociologicheskie ocherki*, "Muysl" Publ., Moscow, 216 p.
2. Kon, I.S. (1987) *V poiskah sebja: Lichnost i ee samosoznanie*, "Politizdat" Publ., Moscow, 366 p.
3. Surtaev, V.Ya. (1999) *Molodezh i kultura*, "SPb" Publ, Saint Petersburg, 224 p.
4. Gvishiani, D.M. and Lapina, N.I. (2001) *Kratkiyi slovar po sociologii*, "Politizdat" Publ., Moscow, 480 p.
5. Osipov, G.V. and Moskvichev L.N. (2008) *Sociologicheskij slovar*, "Norma" Publ., Moscow, 607 p.
6. Kotlyar, A.Je. (2001) "O ponjatii rynka truda". *Voprosy jekonomiki*, № 1, pp. 33–45.
7. Salagaev, A.L. and Shashkin, A.V. (2004) "Molodezhnye gruppirovki: opyt pilotnogo issledovaniya". *SOC/IS*, № 9, pp. 50–58.
8. Ruchkin, B.A. (1998) "Molodezh' i stanovlenie novoj Rossii". *SOC/IS*, № 5, pp. 90–98.
9. Mitjagina, E.V. and Bushkova-Shiklina, Je.V. (2010) "Molodjozhnyj potencial: ponjatijnye granicy i vozmozhnosti sociologicheskogo izmerenija". *Innovacionnyj potencial sovremennoj molodezhi: pro-blemy i uslovija razvitija*, "VSHU" Publ., Kirov, pp. 8–19.
10. Mitjagina, E.V. and Bushkova-Shiklina, Je.V. (2010) "Sistema chelovecheskogo potenciala: konceptualizacija ponjatija", "VSHU" Publ., Kirov, № 3, pp. 15–21.
11. Vishnevskij, Ju.R. and Shapko, V.T. (2006) *Sociologija molodezhi*, Ekaterinburg, 433 p.
12. Lukov, V.A. (2012) "Konceptualizacija molodjozhi v XXI veke: novye idei i podhody". *SOC/IS*, № 1, pp. 5–17.
13. Lukov, V.A. (2012) "Konceptualizacija molodjozhi v XXI veke: novye idei i podhody". *SOC/IS*, № 2, pp. 21–30.
14. Rubchevskij, K.V. (2003) "Socializacija lichnosti: interiorezacija i social'naja adaptacija". *Obshhestvennye nauki i sovremennost*, pp. 147–151.
15. Solodnikova, I.V. (2007) "Socializacija lichnosti: sushhnost' i osobennosti na raznyh jetapah zhizni". *SOC/IS*, № 2, pp. 63–75.
16. Abels, H. (2000) *Interakcija, identichnost', prezentacija. Vvedenie v interpretativnuju sociologiju*, "Aletejja" Publ, Saint Petersburg, 268 p.
17. Berger, P. and Lukman, T (1995). *Socialnoe konstruirovanie realnosti. Traktat po sociologii znaniya*, "Medium" Publ., Moscow, 323 p.
18. Okolskaya, L.A. (2010) "Socializacija s točki zrenija social'nogo konstruktivizma i teorij social'no-go vosproizvodstva". *Voprosy vospitanija*, № 1 (2), pp. 25–33.

**METHODICAL APPROACH TO THE ESTIMATION OF EFFICIENCY  
OF THE USE OF ENERGY SUPPLY  
IN THE TRUNK GAS TRANSPORT**

*ABSTRACT.* THE AUTHOR VIEWS THE METHOD OF ANALYSIS OF THE HIERARCHIES TO ASSESSING ENERGY EFFICIENCY IN THE ENTERPRISES OF THE MAIN TRANSPORT OF GAS. THE METHOD ALLOWS TO INVESTIGATE THE CONSUMPTION OF ENERGY RESOURCES OF EQUIPMENT, CONSUMPTION OF RESOURCES IN TECHNOLOGICAL OPERATIONS AND THE CREATION OF FAVORABLE CONDITIONS, AND TO ASSESS THE STATE OF ACCOUNTING SYSTEMS AND THE WORK ORGANIZATION TO IMPROVE THE EFFICIENCY OF THE ENERGY SUPPLY USE.

*KEYWORDS:* ENERGY RESOURCE, EFFECTIVENESS, USE OF RESOURCES, MAIN TRANSPORTATION OF GAS, COMPRESSOR STATIONS.

**LARISA VAZHENINA**

CANDIDATE OF ECONOMIC SCIENCES, ASSOCIATE PROFESSOR AT THE CHAIR OF ECONOMICS, ORGANIZATION AND MANAGEMENT OF PRODUCTION, TYUMEN STATE OIL AND GAS UNIVERSITY

Fuel and energy complex of Russia has always played an important role in the economy of the country. During the reform period due to sharp decline in output in all sectors of the economy the role of the complex increased.

At the heart of improving the efficiency of any production the saving productive resources of all kinds lay. Due to the continuous rise of energy costs in the country, increase of the gas transportation cost price, nonrenewability of natural resources, the most important areas of work in the field of gas trunk transport should be considered the efforts, aimed at reducing the energy and cost savings, as well as modern approaches are relevant to assess the level of sustainable consumption and energy resources. The object of research is the subsidiary of "Gazprom", engaged in gas transmission.

The enterprise assessment of energy consumption is fragmented and does not fully reflect the effectiveness of their use in general. Therefore, there is the need for such methods, which will assess to evaluate the effectiveness of energy use in the workplace and work power as the whole, in particularly in relation to pipeline transport of gas.

In the previous study [1], the authors considered tenths effective method for estimating energy consumption on the enterprises of gas trunk transport. In this study, the authors propose to apply the analytic hierarchy process (developed by T. Saati) for evaluating the effectiveness of the generalized energy consumption in gas trunkline.

The purpose of the hierarchy method analysis is to identify the directions of irrational energy consumption in the enterprise, using the ranking of these areas on the importance and priority.

In accordance with the proposed methodology, conclusion on the effectiveness of consumption of energy is given on the basis of test results such areas as accounting, control and rationing of energy consumption; energy consumption by the fields of use and ways to improve energy efficiency.

At the first stage the hierarchy was built, which includes six levels: focus, primary factors, actors, goals, actors' goals, contrasting scenarios and generalized scenario (Fig. 1).

Then a set of matrices of pairwise comparisons for each of the lower levels, one for each element of the matrix for each top level, was constructed (Table 1-2). To establish the relative importance of the hierarchy elements the ratio scale was used [2].

On the second level of the hierarchy, there is only one matrix of paired comparisons, which determines the factor with greater influence on the rational use of energy. Calculation is carried out on the principal of eigenvector  $W$ , consisted from ( $W_1, W_2, W_3$ ):  $W_1 = 1,4 / 16,73 = 0,08$ ;  $W_2 = 9 / 16,73 = 0,54$ ;  $W_3 = 6,33 / 16,73 = 4,20$ .

The calculations show that the most dominant factor is the consumption of energy by the fields of use – 0,54, second place is the work to improve energy efficiency – 0,38.

Each pair of actors is compared to the level of the relative factors impact. The results are in Table 2. Further the importance of the actors' goals are determined. The goals of each 8 actor were compared in pairs. As the result there are the priority actors, showing the order and weight, and thus on the basis of Table 2 decision-making matrix is built in Table 3.

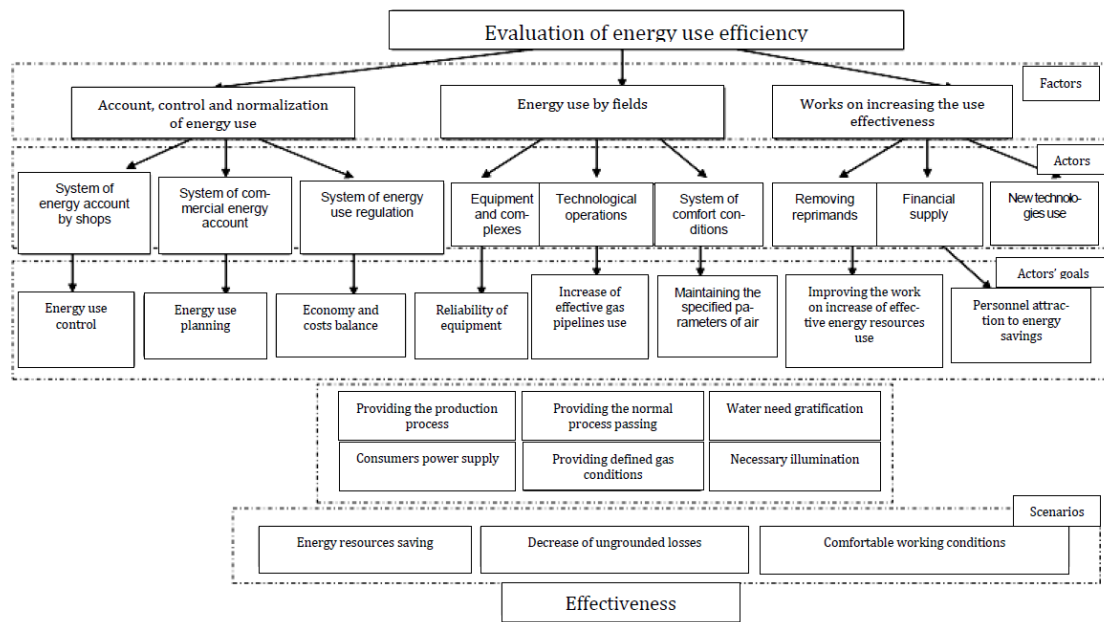


FIG. 1. LEVEL HIERARCHY

TABLE 1  
THE DEGREE OF FACTORS INFLUENCE ON THE RATIONAL USE OF ENERGY

Factor	Factor			Total
	Accounting, control and normalization of resources consumption	Energy consumption by the fields of use	Work to improve efficiency	
Accounting, control and normalization of resources consumption	1,00	0,20	0,20	1,40
Energy consumption by the fields of use	5,00	1,00	3,00	9,00
Work to improve efficiency	5,00	0,33	1,00	6,33
Total	11,00	1,53	4,20	16,73
W	0,08	0,54	0,38	
$\lambda_{\max}$		3,34		

TABLE 2  
THE DEGREE OF ACTORS INFLUENCE ON RATIONAL FACTORS OF ENERGY USE

Actor	Factor		
	Accounting, control and normalization of resources consumption	Energy consumption by the fields of use	Work to improve efficiency
System of commercial energy account	0,35		
System of energy account by shops	0,45		
System of energy use regulation	0,20		
Equipment and complexes		0,50	
System of comfort conditions		0,30	
Technological operations		0,20	
Removing reprimands			0,35
New technologies use			0,25
Financial supply			0,40
$\lambda_{\max}$	5,38	6,70	5,91

TABLE 3  
THE MATRIX OF DECISION-MAKING

<b>A</b>	<b>B</b>	<b>C</b>	<b>Σ</b>
0,35	–	–	0,0294
0,45	–	–	0,0378
0,20	–	–	0,0168
–	0,50	–	0,2690
–	0,30	–	0,1614
–	0,20	–	0,1076
–	–	0,35	0,1323
–	–	0,25	0,0945
–	–	0,40	0,1512

On the next stage, there is the degree of actors' importance, concerning factors for the future sustainable use of energy resources. To determine the influence of factors on the future of the rational use of energy resources in the enterprise the following calculations were made. Each value of A, B, C is multiplied by the corresponding value of W. The result is the sum of each actor. We can conclude which of them has the greatest impact on the primary factors, influencing the rational use of energy resources in the enterprise.

Because of equipment and complexes actors, comfort conditions system and financial supply have for more than 50 % of exposure to the primary factors, influencing the rational use of energy, in the future we will use these actors to get the balance scenario.

Now we find the important goals for the actors, multiplying the eigenvector corresponding weight goals for the actor:

1. For electrical energy and natural gas consumption:

$$\begin{array}{|c} 0,4 \\ 0,35 \\ 0,25 \end{array} \times 0,269 = \begin{array}{|c} 0,1076 \\ 0,0942 \\ 0,0673 \end{array}$$

2. For heat energy consumption:

$$\begin{array}{|c} 0,33 \\ 0,27 \\ 0,4 \end{array} \times 0,1614 = \begin{array}{|c} 0,0533 \\ 0,0436 \\ 0,0646 \end{array}$$

3. For financial supply:

$$\begin{array}{|c} 0,2 \\ 0,15 \\ 0,15 \\ 0,5 \end{array} \times 0,1512 = \begin{array}{|c} 0,0302 \\ 0,0227 \\ 0,0227 \\ 0,0756 \end{array}$$

Using six goals with maximum value and normalizing their weight, we receive the following result vector of weights goals. This requires a normalization factor.

$$K_{\text{norm}} = 1 / \Sigma \text{ major goals} = 1 / 0,4255 = 2,351.$$

Multiplying the vector of the important actors' goals on the normalization factor, we obtain the result vector of weights goals. The sum of the resulting vector is equal to 1.

$$\begin{array}{|c} 0,1076 \\ 0,0942 \\ 0,0533 \\ 0,0646 \\ 0,0302 \\ 0,0756 \end{array} \times 2,351 = \begin{array}{|c} 0,253 \\ 0,221 \\ 0,126 \\ 0,152 \\ 0,071 \\ 0,177 \end{array}$$

The resulting normalized vector of priorities will be applied in what follows for the balance scenarios.

On the next step, the degree of impact scenarios on the actors' goals is determined. Results of pairwise comparisons processing matrices are presented in Table 4.

For weights scenarios, relative to the focus of the hierarchy (rational use of energy), we multiply matrix, formed from the values of the vectors of priorities scenarios for the purposes of weight vector (Table 5).

Then each value of the priority vector scenarios matrix multiply on the resulting vector of weights goals and obtain:

Gas save =  $(0,3 \times 0,253) + (0,55 \times 0,221) + (0,3 \times 0,071) + (0,15 \times 0,177) = 0,246$ .

Electric energy save =  $(0,15 \times 0,253) + (0,3 \times 0,152) + (0,15 \times 0,71) + (0,2 \times 0,177) = 0,13$ .

Heat save =  $(0,2 \times 0,126) + (0,15 \times 0,071) + (0,2 \times 0,177) = 0,096$ .

Reduction of unreasonable energy losses =  $(0,55 \times 0,253) + (0,45 \times 0,221) + (0,2 \times 0,126) + (0,2 \times 0,152) + (0,4 \times 0,071) + (0,45 \times 0,177) = 0,4$ .

Creating comfortable working environment =  $(0,6 \times 0,126) + (0,5 \times 0,152) = 0,165$ .

The analysis of the resulting vector of priorities shows that the scenario "Reduction of unreasonable energy losses" has the greatest weight – 0,4, and therefore is the most likely.

TABLE 4  
RESULTS OF PROCESSING THE PAIRWISE COMPARISONS MATRIX

Scenario	Actor's goal					
	Reliability of the equipment	Supplying production process	Maintaining the specified parameters of air	The required level of illumination	Control over the flow of energy	Attract staff to energy issues
Energy saves						
1. Gas	0,30	0,55			0,30	0,15
2. Electric energy	0,15			0,30	0,15	0,20
3. Heat energy			0,20		0,15	0,20
Reduction of unreasonable energy losses	0,55	0,45	0,20	0,20	0,40	0,45
Creating comfortable working environment			0,6	0,50		

TABLE 5  
THE MATRIX OF VECTORS PRIORITY SCENARIOS

A	B	C	D	E	F
0,3	0,55	–	–	0,30	0,15
0,15	–	–	0,30	0,15	0,20
–	–	0,20	–	0,15	0,20
0,55	0,45	0,20	0,20	0,40	0,45
–	–	0,60	0,50	–	–

At the last stage, the effects of the adoption of the most probable scenarios are determined and the generalized scenario is assessed. Knowing the relative weights of scenarios, obtained in the previous step, the generalized scenario can be generated. Generalized measure on the scale for the state variable is determined by summing up the weights of scenarios with the corresponding values of a variable state.

Generalized value for all scenarios =  $1,031 + 1,031 + 1,047 + 4,142 + 3,401 + 3,366 + 2,002 + 3,195 + 2,094 = 21,309$ . Value on a generalized scale, equal to 21,309, is not "weight" or priority rank, it is used as the global measure or benchmark, against which can be measured appropriately degree of similarity between the probable and desirable future. The results of our analysis with respect to gauge the state variables under consideration scenarios are presented in Table 6.

In conclusion, it can be noted that the application of the analytic hierarchy method all the qualitative and quantitative sources of resource consumption were discussed in details. The analysis of the resulting vector priorities, which showed that the scenario of "unreasonable losses reduction" has the greatest weight – 0,4, and therefore is the most likely. We identified the consequences of making the most likely scenarios, and evaluated the generalized scenario. Value on a generalized scale was 21,309 (out of 30). Evaluation of the state variables with respect to gauge considered scenarios allowed us to make the following conclusions: the situation with gas savings in gas transport system in the nearest future is likely to change for the better one. The greatest influence on changes that have work – energy-consuming equipment and systems present in whole or in types of finite energy resources due to more reliable operation and ensure the smooth production process. Also technological processes influence on gas savings, which can be achieved by



increasing the efficiency of operation of trunk steel pipelines, ensure the normal course of the process and maintain a set of technical condition of the equipment. Gas losses are possible due to the introduction of new technologies.

1. Electricity and heat energy savings are mainly due to changes in the system of equations comfort. Our study indicated that workers of enterprises of gas transmission system have comfort conditions and are given special attention. It is important to note that the economy of electric and heat energy affects financial incentives staff. In the gas transmission system there is a system of bonuses for the rational use of energy resources. In the study [3] the scale of penalties for inefficient use of energy resources is suggested. 2. The decrease of unreasonable losses occur due to more efficient use of equipment and facilities, manufacturing operations, as well as by removing comments and improvement of the material stimulate.

The study identified the key areas that they need to pay attention to improve the rational use of energy, namely, equipment and systems; system comfortable conditions; financial incentives.

TABLE 6

## DETERMINING THE CONSEQUENCES OF THE ADOPTION OF THE MOST PROBABLE SCENARIOS

Variable of condition (criteria for consequences estimation)	Scenario and its weight						Total weight	Optimal variant
	Gas save	Electric energy save	Heat energy save	Reduction of unreasonable energy losses	Creating comfortable working environment			
Weigh	0,246	0,13	0,096	0,4	0,165			
<i>Accounting, control and normalization of resources consumption</i>								
System of commercial account	+1	+1	+1	+1	+1	+1,031	+1,5	
System of account by shops	+1	+1	+1	+1	+1	+1,031	+1,5	
System of consumption normalization	+2	+2	+1	+1	+1	+1,047	+2	
<i>Energy consumption by the fields of use</i>								
Equipment and complexes	+5	+3	+2	+5	+2	+4,142	+5	
System of comfort conditions	+1	+5	+5	+3	+5	+3,401	+5	
Technological operations	+4	+2	+2	+4	+2	+3,366	+5	
<i>Work to improve efficiency</i>								
Removing reprimands	+1	+1	+1	+3	+2	+2,002	+3	
New technologies use	+2	+3	+3	+3	+5	+3,195	+4	
Financial supply	+3	+1	+1	+2	+2	+2,094	+3	
<b>Total value of all scenarios</b>						<b>+21,309</b>	<b>+30</b>	

## REFERENCES

1. Vazhenina LV integrated approach to assessing the efficiency of energy consumption in enterprises gas trunkline // Herald INZhEKONa. Series "Economy". - You start-1 (24). - St. Petersburg, 2009. - S. 359-362.
2. ANDREICHENKO AV, Andreychenkova O. Analysis, synthesis, planning decisions in the economy. - Moscow: Finance and Statistics, 2000. - 368.
3. Ibid

## THE ESSENTIAL CHARACTERISTIC OF THE REGIONAL SERVICES MARKET

**ABSTRACT.** THE AUTHORS HIGHLIGHT THE FUNCTIONS AND PECULIARITIES OF THE REGIONAL MARKET SERVICES; ANALYZE THE INSTITUTIONAL ORDER, THE INSTITUTIONAL ENVIRONMENT AND THE INSTITUTIONAL STRUCTURE OF THE REGIONAL SERVICES MARKET AS THE ECONOMIC INSTITUTION. IT WAS DETERMINED THAT THE RATIO OF THE INSTITUTIONAL ORDER, THE INSTITUTIONAL ENVIRONMENT AND INSTITUTIONAL FRAMEWORK CAN BE SOLVED IN THE FRAMEWORK OF COMPLEMENTARITY, WHICH PROVIDES THE FOCAL EFFECT OF SUBJECTS AND OBJECTS OF THE REGIONAL SERVICES MARKET.

**KEYWORDS:** REGIONAL SERVICES MARKET, INSTITUTIONAL ORDER, INSTITUTIONAL ENVIRONMENT, INSTITUTIONAL STRUCTURE, FUNCTIONS OF THE REGIONAL SERVICES MARKET, PECULIARITIES OF THE REGIONAL SERVICES MARKET.

### **ALEXANDER LUNEV**

DOCTOR OF ENGINEERING SCIENCES, PROFESSOR AT THE CHAIR OF ENGINEERING PRODUCTION TECHNOLOGY, KAZAN STATE TECHNICAL UNIVERSITY NAMED AFTER A.N. TUPOLEV-KAI

### **NATALIA PUGACHEVA**

DOCTOR OF PEDAGOGICAL SCIENCES, PROFESSOR AT THE CHAIR OF OCCUPATIONAL SAFETY AND LAW, KAZAN STATE ARCHITECTURE AND CIVIL ENGINEERING UNIVERSITY

### **LARISA STUKOLOVA**

DOCTOR OF PEDAGOGICAL SCIENCES, PROFESSOR AT THE CHAIR OF SOCIAL AND PSYCHOLOGICAL MANAGEMENT, INTERNATIONAL INSTITUTE OF THE MARKET

Human service is not only one of the important characteristics of the socio-economic policy effectiveness in the region, but also one of the most dynamic and fast-growing segments of the regional markets. We believe that the regional services market can be regarded as a set of institutions of service providers choice, which flows under the property rights, contracts and competition based on price parameters and the level of offered services quality.

It is established that regional services market performs a number of functions :

- Regulatory function, exposuring through supply and demand on the inside / cross-industry competition;
- Integrative function, providing the establishment and support of backward and forward linkages between producers and consumers ;
- stimulating function, orienting the market price on the level of public expenditures and accounting consumer demand ;
- intermediary function, connecting economically marginalized producers and consumers into a single system;
- information function, mediating knowledge of the market ;
- pricing function, manifesting in the fact that the market recognizes only socially necessary costs that the consumer agrees to pay, and therefore the public market prices, reflecting the needs of both the consumer and the level of service;
- sanitizing function, cleaning the production from economically weak institutional actors and promoting the development of effective and promising firms, providing services;
- social function, causing the customer's satisfaction in the benefits and differentiating the market participants' income.

Thus, the specificity of regional market services includes the following characteristics:

- 1 ) dynamism, rode by the constant change of the demand for services , which is exposed to the time factor;
- 2) territoriality, mediated by socio-economic characteristics and demographic features of the region;
- 3) flexibility, provided by the high sensitivity to changing market conditions, by the inability to store and transport the services;
- 4) openness, provided by the interaction of production and consumption processes, personal contact of producer and consumer and high speed of the capital turnover;
- 5) differentiability, mediated by the diversification and individualization of services demand;
- 6) flexibility, influenced by the paying capacity demand of the population for services;
- 7) " Veblen effect " [1] , reflecting the exponential consumption in the prestigious grounds.

It was found that the regional services market as an economic institution, includes three dialectically interrelated components: institutional order, institutional environment and institutional structure.

Basing on the study of M. Olson [2], we believe that the institutional order is the formal rules and constraints, within which the basic economic institutions and mechanisms for enforcing them are interacting. That institutional order imparts the resistance of constantly reproducing socio-economic relations, proving its worth by official legitimation. Institutional order legalizes the procedures, necessary for ensuring the development of the regional services market, because it forms the common platform of its subjects interaction. [3]

We believe that the institutional environment is the integrity of the formal rules and mechanisms of individuals enforcement to their performance, the informal rules and norms that affect the production, exchange, distribution and consumption of goods. The American economist L. Davis [4] noted that along with the rules that shape the institutional environment, there are rules that are defined as institutional arrangements, which, in turn, determine the forms of cooperation and competition between economic agents. J. Hodgson [5] writes that all authors, exploring the institutional problems, are unanimous in saying that all institutions can be divided into formal and informal.

D. North also divides the institutions by formal and informal ones [6]. The formal ones are the rules, laid down by the law and execution of which is held by the State. The informal ones are the rules of conduct, existing in the form of habits or traditions. Along with the formal rules, the informal rules play the important role. D. North indicates that even in the most developed economical countries, the formal rules are only a small (but important) part of that set of constraints that form the situations of choice before the individual. North D. noted that the informal constraints are "the continuation, development and specification of formal rules and are able to survive thanks to the fact that they form the part of the normal people behavior" [7, p. 108]. And the informal constraints "are changing with different speed from the formal rules" [7, p.113], and specification of established formal rules takes much more time.

Appearing as the mean of human interaction coordination, the informal rules are the continuation and development of the formal rules, socially sanctioned norms of behavior and also the internal standards of conduct, obligatory to follow. Therefore T. Eggertsson [8] believes that the institutional environment, formed by diverse, constantly changing institutional forms, is mobile and conditional to the historical, temporal, cultural context.

It is determined that the appendant and communitarian values influence the formation of the institutional environment of the regional services market. Value is the concept, indicating the cultural, social or personal value (importance) of phenomena of facts of reality. The academician V.N. Lavrynenko [9. 476] believes that the values reflect the society and the individual.

The hierarchical relations of regional services market actors condition the appendant value system (initiative, activity, risk, freedom, creativity, prestige, leadership, innovation, rule of law, etc.), by the constant process of powers and responsibilities redistribution [10]

"vertically" and "horizontally" (subsidiarity). The subsidiary value system influences the development of the business communities, forming the regional services market and providing the increase its competitiveness [11].

The communitarian value system (altruism, unity, support, mutual aid, charity, patriotism, responsibility, charity, solidarity, etc.) reflects the primacy of society interests over the individual interests and is dialectically interconnected with the Russian-Orthodox phenomenon – the Cathedrality, which dates back to antiquity. The communitarian value system provides the identification of actors with the specific model of the regional services market development and the formation of their willingness to reproduce their roles and functional interactions.

Thus, the institutional environment can be seen as the dialectical relationship of formal and informal institutions. In these institutions together, we can identify three components:

legal (L) – the regulations;

social (S) – the responsibilities, stereotypes, collectivism, collaboration, cooperation, individualism, tradition, freedom, etc.;

political (P) – the administrative division, " the vertical of power", appointment, meetings, government, elections, appeals to authorities, lawsuits, etc.,

The institutional environment (IE) can be written in the form of an expression:  $IE = \{L, S, P\}$ , where IE is a finite set, the components of which are given by the expression and listed, i.e. calculated

according to the theory of sets. The intersection of these components forms the institutional environment. The lack of the institutional environment causes the opportunistic nature of the regional services market and is not accompanied by the systematic reduction of socially necessary costs per unit of useful effect.

The institutional structure is a set of institutions and institutional relationships, ensuring the effectiveness of traditional (public authorities and local self-government, population, state and municipal property) and the formation and development of innovative (foundations, unions, associations, specialized banks, public non-profit entities, property rights, the business community and other) subjects of the regional services market (see Scheme 1).

The common good is the unconditional imperative and functional criterion of constructing the institutional structure. Therefore, the effectiveness of the regional services market can be provided by the institutional balance between the institutions as organizational entities engaged in certain economic activities, and the relationship between them, in order to increase the "increasing returns" [12] services. The growth of the increasing return at the regional market, in our opinion, may be conditioned by the three factors.

1. The complication of the services sector as the result of technological and social development (intensification of the process of production and additional capital investment, labor cooperation, expand knowledge, increase in population, the growth of settlements, etc.), which creates the additional opportunities for individual subjects of the regional services market.

2. The structural changes in the services sector, the increase of the share of organizations and enterprises with increasing returns: the development of transport services; upscaling production services, the formation of special high-tech segment information (information services), another of the business world, where the law of increasing returns rules [12].

3. The transition to the new way, the knowledge economics, signifying the growing importance of the man and his skill in economic development [13].

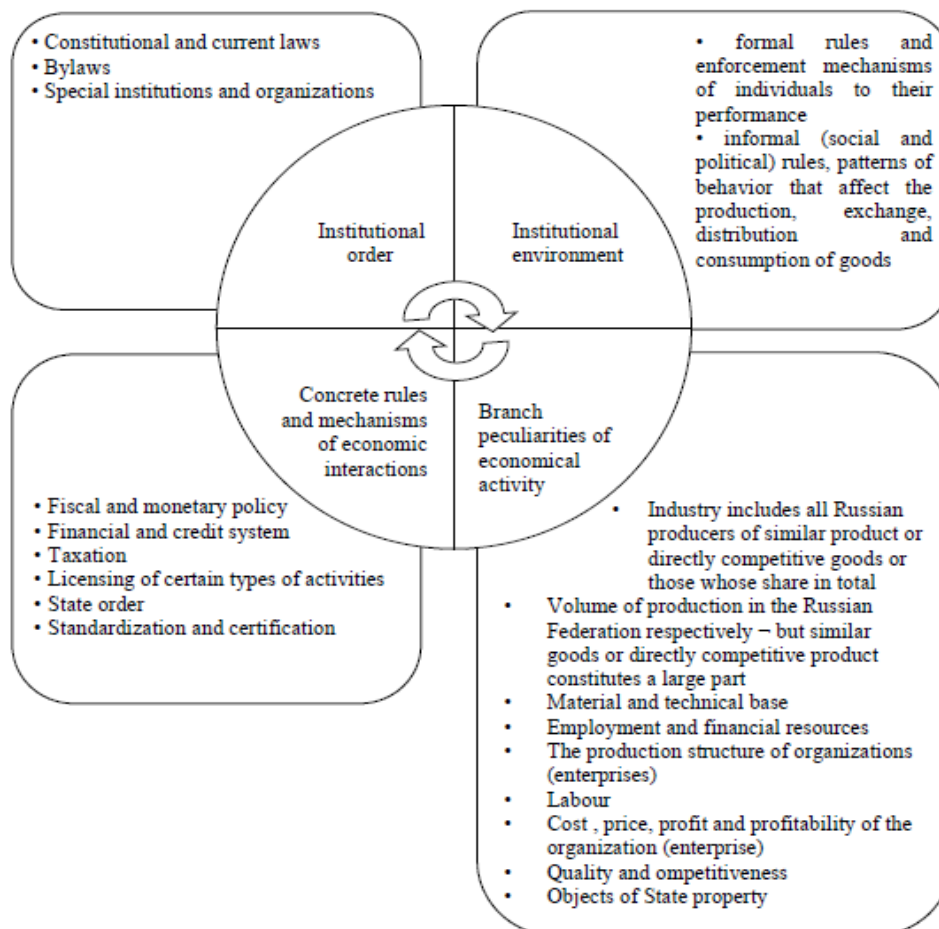


FIG. 1. THE INSTITUTIONAL STRUCTURE OF THE REGIONAL SERVICES MARKET

The problem of correlation of the institutional order, the institutional environment and the institutional structure can be solved in the framework of complementarity – the system integrity, not conflicting to each other rules and incentives of activities. It was found that the complementarity of the institutional order, the institutional environment and the institutional structure provides the focal effect of subjects and objects of the regional services market.

In the summary, we note that the regional services market as the economic institution can be characterized by: the multilevelty (includes the rules of federal, regional and municipal levels); duality (derived from formal and informal rules, institutional dichotomy); fragmentation (inability to provide frontal blocking undesirable type of behavior, which manifests itself in the circumvention of the formal institutional framework).

#### REFERENCES

1. T. Veblen Theory of the Leisure Class : an economic study of institutions. Lane. from English. SD Sorokina. - Moscow: Progress Publishers , 1984. - 183.
2. M. Olson, The Rise and decline of nations. Economic growth , stagflation and social sclerosis. - Novosibirsk : Ekor , 1998. - 432.
3. Utkin AN Influence of the education market to develop the economy and efficiency of the labor market // Concept. - 2013. - № 01 (January ). - ART 13004. - URL: <http://e-koncept.ru/2013/13004.htm>. - State. reg. E FS No 77-49965. - ISSN 2304 -120X. [ Date of access 12/11/2013 ].
4. Davis L., North D. Institutional Change and American Economic Growth. - Cambridge. - 1971. - P. 5-6.
5. J. Hodgson What institutions ? // Problems of Economics. - 2007. - № 8. - S. 27-41.
6. North D. Institutions , ideology and economic efficiency // From Plan to Market. Future post-communist republics / ed. LI Piyasheva , JA Dorn. - Moscow : Catalaxy, 1993. - S. 307-319.
7. North D. Institutions, Institutional Change and Economic Performance / lane. from English. AN Nesterenko ; foreword. and scientific. Ed. BZ Milner. - M.: Fondekonomicheskoy book "Elements" , 1997. - 180. - ( Contemporary institutional-evolutionary theory ) [electronic resource ] URL: <http://www.schumpeter.ru/content/Nort-institutes.pdf> [ date accessed : 11.11.2013 ].
8. Eggertsson T. Economic behavior and institutions. - Moscow: Business, 2001 [electronic resource ] URL: <http://www.schumpeter.ru/content/Nort-institutes.pdf> [ date accessed : 11.11.2013 ].
9. Philosophy / ed. prof. VN Lavrynenko. - M.: Lawyer , 1996. - 512. [Electronic resource ] URL: [http://www.gumer.info/bogoslov\\_Buks/Philos/lavr/index.php](http://www.gumer.info/bogoslov_Buks/Philos/lavr/index.php) [ date accessed : 11.11.2013 ].
10. Evdohina OS Development of a regional market of poultry products // Concept. - 2013. - № 05 (May). - ART 13114. - URL: <http://e-koncept.ru/2013/13114.htm>. - State. reg. E FS No 77-49965. - ISSN 2304 -120X. [ Date of access 12/11/2013 ].
11. Frolova VB Franchising as a basis for long-term business development // Concept. - 2013. - № 11 (November). - ART 13213. - URL: <http://e-koncept.ru/2013/13213.htm>. - State. reg. E FS No 77-49965. - ISSN 2304 -120X. [ Date of access 12/11/2013 ].
12. W. Brian Arthur. Increasing returns and two business world // Economic Journal , Rostov State University. - 2005. - V.3. - № 4. - S. 14-32.
13. Kulikova P. Improvement of Education to increase the innovative capacity of the economy // Concept. - 2012. - № 6 ( June). - ART 12070. - URL: <http://e-koncept.ru/2012/12070.htm>. - State. reg. E FS No 77-49965. - ISSN 2304 -120X. [ Date of access 12/11/2013 ].

#### THE SUFFICIENT CONDITION FOR THE SOLVABILITY OF THE ELEMENTARY ZERO-SUM MATRIX GAMES (NXN)

**ABSTRACT.** THE AUTHOR INTRODUCES THE CONCEPT OF STABILIZING STRATEGIES IN THE MATRIX GAMES (NXN); DESCRIBES THE CONDITIONS OF THEIR EXISTENCE AND OPTIMALITY; GIVES THE EXAMPLES AND SUGGESTS THE NEW INTERPRETATION OF MATRIX GAMES SOLVING AS THE SEARCH OF STABILIZING STRATEGIES.

**KEYWORDS:** ANTAGONISTIC MATRIX GAMES (NXN), ELEMENTARY SOLVABILITY, VON NEUMANN THEOREM, STABILIZING STRATEGIES, STABLE WIN (LOSS) OF THE PLAYER.

#### OLEG KOLTUNIVSKIYI

CANDIDATE OF PHYSICAL AND MATHEMATICAL SCIENCES, HEAD OF THE CHAIR OF NATURAL SCIENCES, YUZHNO-SAKHALINSK INSTITUTE OF ECONOMICS, LAW AND COMPUTER SCIENCES

In this work, the payoff matrix of the game is the square matrix of n order.

The mixed strategies X and Y of the first and second players, as usual, will be called a row vector of size (1xn) and the column vector (nx1) correspondently, consisting of the probabilities of players pure strategies.

Definition 1. Strategies X- or Y+ are called stabilized, if exist the numbers v- и v+, which fulfil the conditions  $X \cdot AY = v-$  or  $XAY = v+$  for any strategy.



The meaning of stabilization: strategies X- or Y+ provide the constant win or loss for the first or second player, independently from the chosen strategy.

**Lemma 1.** If the meanings  $v^-$  и  $v^+$  are equal, then they are equal to the cost of the game  $v$ :

$$v^- = v = v^+$$

It should be reminded, that the well-known von Neumann theorem about minimax said that there are the optimal balanced players strategies  $X^*$  и  $Y^*$ , such as

$$\max_X \min_Y XAY = \min_Y \max_X XAY = v = X^*AY^*$$

Carrying out the conditions of Lemma 1, the strategies  $X^*$  и  $Y^*$  can be strategies X- и Y+ correspondingly.

It is obvious, that

$$v^- \leq v \leq v^+$$

Defining the main results in two new matrixes from the matrix A the next way:

Subtract the first column from each previous one (elementwise). Number 1 should replace the elements of the last column. It will be the matrix B.

The analogous transformations should be held within the last and previous strings of the matrix A. It will be matrix C.

The next theorems are justly:

**Theorem 1.** If the algebraic adjuncts  $B_{in}$  ( $i=1, \dots, n$ ) of the last column of the matrix B elements are all non-positive or non-negative and are not equal to 0, then the stabilizing strategy X of the first player and his stable win  $v$  exist and are determined by the equations:

$$X = \frac{1}{\det B} (B_{1n}, \dots, B_{nn}), v = \frac{\det A}{\det B}.$$

**Theorem 2.** If the algebraic adjuncts  $C_{nj}$  ( $j=1, \dots, n$ ) of the last column of the matrix B elements are all non-positive or non-negative and are not equal to 0, then the stabilizing strategy Y+ of the first player and his stable win  $v^+$  exist and are determined by the equations:

$$Y^+ = \frac{1}{\det C} (C_{n1}, \dots, C_{nn}), v^+ = \frac{\det A}{\det C}.$$

**Theorem 3.** If the matrixes B и C fulfil the conditions of the theorems 1 and 2 correspondingly, than

1) The determinants are equal

$$\det B = \sum_{i=1}^n B_{in} \quad \text{и} \quad \det C = \sum_{j=1}^n C_{nj}$$

2) One of the optimal strategies  $X^*$  и  $Y^*$  in the antagonistic game with the payoff matrix A are described in the theorems 1 и 2 stabilized strategies of the players X- и Y+ correspondingly:

$$X^* = X^-, \quad Y^* = Y^+$$

And the game cost  $v$  is equal to the determinants ratio

$$v = \frac{\det A}{\det B} = \frac{\det A}{\det C}.$$

**Note 1.** The theorems 1-3 are reversible in the condition that one or both players have the stabilizing strategies and the correspondingly algebraic adjuncts of the matrixes B and (or) C are all non-positive, or non-negative.

**Note 2.** From the theorem 3 follows that the same sign of the matrix elements adjuncts B and C involves the activity (usage) of each players strategy in the optimal solution ( $X^*$ ,  $Y^*$ ).

The reverse is not correct – in the common case the activity of each strategy in one (!) of the optimal solutions does not lead to the positivity or negativity of all the adjuncts. It is enough to see the matrixes with the same (!), when all the elements are the same.

The examples prove the written above.

**Example 1.** It is known [1, 69], that for the payoff square matrix A, satisfying the Minkovski – Leontiev condition, all the players strategies will be active.

$$A = \begin{pmatrix} 4 & 0 & 1 \\ 1 & 10 & 2 \\ 2 & 2 & 16 \end{pmatrix}, \det B = \det C = 205, \det A = 606,$$

$$X^* = \frac{1}{205}(126; 56; 23), Y^{*T} = \frac{1}{205}(148; 43; 14), v = \frac{606}{205},$$

**Example 2** shows that for the game with the payoff matrix A, satisfying the theorem 3 condition, not all players strategies should be active.

(a – any number)

$$A = \begin{pmatrix} 10 & 4 & 5 \\ 4 & 10 & 9 \\ 5 & 9 & a \end{pmatrix}, X^* = X^* = Y^{*T} = Y^{*T} = (1/2; 1/2; 0), v = 7.$$

**Example 3** shows that for the game with the dominating (strict) strategy for one player the combined strategy (activating the dominating one), making the constant win or loss of the player, can exist.

$$A = \begin{pmatrix} 8 & 1 & 5 \\ 2 & 6 & 3 \\ 1 & 3 & 2 \end{pmatrix}, X^* = \frac{1}{8}(2; 1; 5), v = \frac{23}{8} (v = 27/7)$$

**Example 4** shows that for the game with the probability of consistent exclusion of the dominated players strategies the stabilizing strategies for each player in the initial game (!) exist.

$$A = \begin{pmatrix} 1 & 2 & 2 \\ 2 & 1 & 1 \\ 0 & 2 & 1 \end{pmatrix}, X^* = X^* = (1/2; 1/2; 0), Y^{*T} = Y^{*T} = (1/2; 0; 1/2), v = 3/2$$

In the next examples the payoff matrix A has the saddle point. The stabilizing players strategies can be from zero to two.

**Example 5.** Two stabilizing strategies.

(see also ex. 2)

$$A = \begin{pmatrix} 2 & 2 & 3 \\ 2 & 2 & 1 \\ 1 & 3 & 6 \end{pmatrix}, X^* = X^* = Y^{*T} = Y^{*T} = (1/2; 1/2; 0), v = 2$$

**Example 6.** Only one player has the stabilizing strategy.

$$A = \begin{pmatrix} 0 & 5 & 2 \\ -1 & 3 & 4 \\ -2 & 4 & 3 \end{pmatrix}, Y^{*T} = (0; 1/2; 1/2), v^* = 3,5 (v=0),$$

$$B_{13} = -10, B_{23} = -13, B_{33} = 17.$$

**Example 7.** Players do not have stabilizing strategies.

$$A = \begin{pmatrix} 0 & 1 & 2 \\ -1 & 3 & 4 \\ -2 & 4 & 3 \end{pmatrix}, v = 0$$

$$B_{13} = -10, B_{23} = 7, B_{33} = -3, C_{31} = -4, C_{32} = -3, C_{33} = 1$$

The author's attention to this problem was attracted by the problem 280 [2, c.184], when the elementary methods were viewed at the game theory lessons in some Sakhalin universities.

The other elementary algebraic methods of solving the antagonist matrix games (nxn) are described in [3, c. 39-52].

The author does not refer to the main definitions, notions and theorems, obviously known to each specialist.

The author suggests the following way of antagonist games solvation: non-active players strategies can be always chosen the way, that the payoff matrix A of free size (mxn) will be reduced to the square matrix A\* of the size (n\*xn\*) with the properties:

1) The games costs are equal :  $v(A) = v(A^*)$ ,

2) The optimal players strategies in the game with the matrix  $A^*$  are stabilizing, when each player uses the similar strategy and reaches the goal, at the same time he does not pay attention to another player behavior. Isn't it the antagonism?

Finally, we should note, that in the game (2x2) without the saddle point the stabilizing players behavior is at the same time minimax and maximin (!). So, the usually determined as "the best behavior in the worst situation" is at the same time "the worst behavior in the best situation"!

#### REFERENCES

1. Carlin S. Mathematical methods and theory in games, programming and economics. - New York: Wiley, 1964.
2. Kalikhman IR Collection of problems in mathematical programming. - M.: Vyssh.shkola, 1975.
3. Kolobashkin LV Fundamentals of the theory of games: a tutorial. - M.: BINOM. Knowledge Laboratory, 2011.

### MATHEMATICAL MODELING IN PSYCHOLOGICAL RESEARCHES

*ABSTRACT.* THE AUTHOR CONSIDERS THE NATURE OF MATHEMATICAL MODELING AND ITS SIGNIFICANCE IN PSYCHOLOGICAL RESEARCHES. THE AUTHOR DISTINGUISHES THE TYPES OF MATHEMATICAL MODELS: DETERMINISTIC, STOCHASTIC MODELS AND SYNERGETIC MODELS. THE SYSTEM APPROACH IS PROPOSED AS AN INSTRUMENT OF IMPLEMENTATION OF MATHEMATICAL MODELLING IN PSYCHOLOGICAL RESEARCH.

*KEYWORDS:* MATHEMATICAL MODELING, PSYCHOLOGICAL RESEARCH, MATHEMATICAL MODELS, SYSTEM APPROACH

#### **ALEKSANDRA ZELKO**

CANDIDATE OF PEDAGOGIC SCIENCES, ASSOCIATE PROFESSOR AT THE CHAIR OF PEDAGOGICS AND EDUCATIONAL TECHNOLOGIES, IMMANUEL KANT BALTIC FEDERAL UNIVERSITY

Mathematical modeling is widely used in science and practice, because it allows to capture any structural changes in the system and to reflect them in the quantitative form. Modeling is necessary for analyzing the system effectiveness, forecasting and designing the system development.

However, in the process of psychological research, it was not found an adequate use for modeling, despite the fact that the essence of the process of cognition is inextricably linked with modeling: the study is based on the construction of the studying object image, settling its basic properties and relationships. One of the reasons of such position of modeling lies in the idea of methods of psychological research classification. In the classification proposed by B.G. Ananiev [1], modeling methods are empirical (empirical methods of obtaining scientific data and education facts) together with the methods of observation, experimental and biographical.

It should be noted, that B.G. Ananiev's classification is based on the need for a working methods classification, which "would be consistent with the order of operations in scientific research, determining the integrity of the cycle of modern psychological research" [1, c. 205].

We believe that consistently pursuing the idea of methods of psychological research classification, it is advisable to allocate the modeling methods (mathematical, cybernetic, simulation) in the separate class, because modeling takes the special place in the system of psychological research methods. We recognize that the subject of psychology is the processes of subjective reflection of objective reality, which are necessary for the regulation of behavior and activity. Actually, in observation, experiment and other empirical methods of psychological analysis, the object of the research is the behavior of subject's mental activity and its products. In this context, the adequate method of psychological research must a priori be the hypotheses about the mechanisms of subjective reflection and subsequent testing of these hypotheses. The most accurate method of bringing up and testing the hypotheses is to formulate the hypotheses about the mechanism of the studying phenomenon in the form of the model, and then the model observation with the behavior, recorded in the experiment with the real subject of mental activity. So, the phase of application the organizational, empirical and data processing methods corresponds to the certain researches, preceding the modeling stage.

V.Y. Krylov developed the general scheme of theoretical and experimental research, including the construction of the mathematical model of the studying phenomenon [5]. The highlight of the general scheme is to build the standard, and then the narrative (descriptive) model of the studying phenomenon. The comparison of V.Y. Krylov's scheme and the content of the cognitive procedures

stages suggests that the standard model is the realization of a theoretical concept and its concretization in the theoretical view.

The model is constructed by the means of logical and mathematical analysis of all aspects of the studying phenomenon. Referring to the experimental study, this analysis takes into account a priori worded criteria for matching the experimental data and results of the standard model functioning. At the stage of building the standard model the system of basic concepts should be chosen and fixed (determined), by means of which the further experimental data will be described and the narrative model will be built. Depending on the varying experimental conditions, more than one narrative model can be constructed. The descriptive models, based on the narrative ones and considering the concrete experimental data, are transformed forms of the essence of the studying phenomenon.

Thus, the application of V.Y. Krylov's scheme of the theoretical and experimental research, based on the mathematical model of the studying phenomenon, is one of the possible implementations of the common dialectic and materialistic procedure of the phenomenon disclosure.

The task of presenting the research results in the form of the mathematical model needs the strict requirements of the experiment organization. It is true, that the study should be organized and carried out in the way that the results can be combined into a coherent system of beliefs, sufficient to build the model. The model should be capable for autonomous functioning, reproducing the studying phenomenon in the necessary aspects.

According to foresaid, in psychology the mathematical models are divided into 3 categories [3]:

- Determinated models (the graph theory; geometrical modeling; logical-mathematical models). These models include the models of the reflexive behavior, suggested by V.A. Lefevr and the evolution of such models [6]. V.A. Lefevr introduced different types of reflexive closures, which allow using algebraic apparatus to model the situations, where the subject interacts with the world and with the other subject.

Modeling of the psychological structures and processes, using the graph theory and geometric modeling, can also be referred as deterministic ideas. For example, the process of perception can be modeled using the subjective spaces; the personality theory uses the classification models and spatial models, based on reconstructing the semantic space. These models are constructed by means of multidimensional scaling and cluster analysis. The dynamics of spaces changes is modeling by means of the regression functions. In this case, we can say that the systematic approach with the mathematical apparatus should be applied, because the complexity of the modeling object requires the use of different types in specific ratio and correlation.

- Stochastic models (the theory of probability, game theory, dynamic programming). The important class of stochastic models are probabilistic models with latent variables. The methods of latent variables include regression analysis, single-factor analysis, methods of latent structures.

Probabilistic models represent the largest class of models in psychology. According to these models, the probationer sets up the hypothesis from one subset, and in the case of correct solution the next hypothesis is pulled out of the same subset, but in the case of failure one of the two subsets will be selected with the probability  $p$ . These methods also analyze the process in dynamics. However, if the state of the system is important before or after the experiment, the dynamics of the process is not studied.

That is why the urgent task in this direction is the establishment of formal mathematical models of humans' behavior, based on their subjective experience, personal characteristics and motivation. The important application of the game theory is its use in experimental psychology as an experimental technique of studying the behavior in the situation with non-opposed interests [2].

- Synergetic models. In these type of models the mathematical idealization includes the sensitivity to initial conditions and the unpredictability of the outcome for the system. The behavior can be described by the aperiodic and ,therefore unpredictable, time series, which is not limited by the stochastic processes. The disorder may precede the appearance of the new structure, so it is aperiodic solutions of deterministic equations, describing the self-organizing structures, help to come to the understanding of the psychological mechanisms of self-organization.

The synergetic approach to psychological systems modeling was for the first time used in Russia in the laboratory of mathematical psychology. In the 80-ies of XX century, the original data analysis methods of psychological research began to develop, for example, multidimensional scaling in pseudo-Euclidean space [5], multidimensional scaling on fuzzy sets, latent structure analysis with partition into classes, cluster analysis on fuzzy sets [2], cluster analysis based on the theory of concepts development, suggested by L.S. Vygotsky [4].

As the result of the techniques, listed above, the following mathematical models were developed: the model of activity success and its dynamics, the relationship of psychological status and quality of life, and others.

In recent years, more attention is paid to the dynamics of mental processes modeling and behavior of the subjects. The main task here is to study and model the systems and structures [7].

The modeling results, based on empirical data and using the synergistic approach, demonstrate the effectiveness of the following research scheme:

- nominating a prior process model;
- obtaining the empirical data according to the model ;
- process dynamics modeling;
- constructing of the model and verification of its adequacy.

According to the proposed scheme, the structure researches are held: cognitive structures, value structures, activity structures, which result is the models of psychological knowledge and perception of the dangers, structural dynamics of life quality and life satisfaction, success dynamics of Science and Technology Center managers, and so on.

It should be noted, that for psychological systems modeling, which all are extent, multidimensional, fuzzy, nonlinear, dynamic, it is necessary to determine the priority of approach, depending on the goals and objectives of the particular study. There are moments of linearity, determinacy and clarity. For example, the problem of adaptation delimitation, occurring in different environments (evolutional and bifurcation).

Of course, the psychological research does not always imply using the mathematical modeling. If it has the character of development, based on the finished theoretical model, and initially is practice-oriented, it is sufficient to carry out the comparative experiment and use methods of quantitative or qualitative analysis of the results. While the theoretical basis or the author's concept can not be developed without the abstraction of a phenomenon or process, its idealization and formalization, which creates prerequisites for mathematical modeling.

Mathematical modeling can act as the mean of systematic approach implementation that provides the opportunities not only for fixing the quantify of relationships in psychological systems, but also for its adequate use of their in-depth qualitative analysis. This is due to the fact that in each system (activity, value orientations, knowledge, adaptation, representations) the structures, corresponding to the objects of the study, must be allocated and relevant methods must be used.

Thus, the acceleration of the psychology mathematization is a direct consequence of the systematic approach and development in the framework of the approach of explanatory abstract models, and application of mathematical modeling becomes one of the most effective methods of psychological research and general theory making.

---

#### REFERENCES

1. Ananov BG On the problems of modern anthropology. - St. Petersburg. 2001.
2. Golovin GM, Krylov V., Savchenko TN Mathematical methods in contemporary psychology : the status , development and application. - M. , 1995.
3. Systematic idea in modern psychology / ed. VA Barabanshikova. - Moscow, 2005.
4. Krylov V., Ostryakov TV New methods of cluster analysis based on psychological theories of development concepts LS Vygotsky // Psychological Journal. - T. 16. - 1995. - № 1.
5. VY Krylov Methodological and theoretical problems in mathematical psychology. - M. , 2000.
6. Lefebvre, VA Formula person. - M. , 1991.
7. Lomov BF Methodological and theoretical problems of psychology. - M. , 1984.



## THE PROCEDURE OF LAND OWNERSHIP PROTECTION

*ABSTRACT.* THE AUTHOR SUGGESTS THE COMPLEX PROCEDURE OF LAND OWNERSHIP PROTECTION APPROPRIATE TO THE TRANSITIVE SYSTEM OF THE RUSSIAN MARKET. THE PROCEDURE IS AIMED AT SELF-DEVELOPMENT OF LAND RELATIONS BUSINESS SYSTEM.

*KEYWORDS:* LAND MARKET, LAND OWNERSHIP, THREAT TO LAND RELATIONS, LAND OWNERSHIP PROTECTION.

**ELENA KOROLYUK**

DOCTOR OF ECONOMIC SCIENCES, HEAD OF THE CHAIR ECONOMICS AND MANAGEMENT, BRANCH OF KUBAN STATE UNIVERSITY

The analysis of the transformational process in modern Russian economics helps to single out the threats to the land ownership relations, i.e. the aggregate of conditions, impairing land owners and infringing reproduction process. The threats can be such as poor development of land market relations, institutional instability of new land ownership forms, over-high taxes for land owners, the most effective property objects transfer to the control of so-called "global players", Russian economic space segmentation devoid of national interests, etc.

The character and the scope of the threats determine the necessity of the specific ownership relation protection in conditions of the transformational processes. The matter is not about the particular protection instruments, but about continuous social and economic procedure of land ownership protection in whole. It is determined not only by the social transformations, which were held in the XXth century, but by the transformations being held in the new XXIth century [1].

The problem of the forming the appropriate protection procedure in different spheres of Russian economic system begins to develop in the modern economic literature. Some aspects of the problem, which are the most important in solving the given scientific task, will be represented here. And the special attention should be paid to the first historical experience in ownership protection problem.

John Locke tried to distinguish the natural borders of the private property, requisite and sufficient for its full functioning. With all this he was guided by the complex of owner's needs and his labour potential. Locke's private property borders were defined by the measures of ground area, which a person can cultivate to get the product, sufficient for his needs [2]. Undoubtedly, leaving the suborders the property can come to the condition of "dan-gerous" functioning, which among other threats can lead to the active social aversion of property expansion. The active participants of forming the land latifundia should remember this side of the problem.

The classical scholar of the world social and economic science A. Smith was the first in studying one of the main aspects of property protection – the role of the state as the guarantor of property inviolability. He concluded that "Until there is no property, there is no state, the purpose of which is to guard the riches and to protect the rich from the poor" [3]. It should be pointed out that the property protection is determined by the social shock potential in the society; the longer and the deeper the social and economic transformations are, the more the property needs the special protection from them. The society expenses on reconstruction of the destroyed institutions of appropriation and alienation in any case will be much higher, than the expenses on creation of usual procedures of shock protection. Hegel showed the real value of the institutions: "Only in property the person has the mind" [4].

I. Sugaipova concluded that the different aspects of the property protection problem assumed the system character in modern economic literature. That is because of the depth, the extension and the divergence of the social and economic transformations during the last decades have no equal and that fact concerns not only to Russia [5].

The author focuses on the phenomenon of the formal shareholder person, which appeared after the long-lasting property transformation.

This type of person became widely spread after privatization process in Russian economics and its peculiarities. As the result the prominent share holdings were evidently underpriced and concentrated in the hands of people, who were not oriented on the development of the corporations, established instead of the state enterprises, but on the derivation of the private benefit. Bought not at the common rates, assets transform the content of the market relations and the thinking of their participants. In essence the formal holders play the role of so-called "minions", prevailing in the

property relations in the absence of effective owners, who are able to develop their property complexes [6].

It should be pointed out that the similar land holder persons are also presented at the land market and this fact is connected with the long-lasting process of property relations transformation.

The main contribution to the property protection problem was made by G. Kleiner, V. Deinega, M. Tsurova, I. Sugaipova. The key concepts of the existing property protection problem will be described and valued below.

G. Kleiner connects the property protection problem with negotiation the phenomenon of “natural person economics”, which was uncovered by the author. The protracted property transformation deprived us the stable business forms and many enterprises be-came only a “signboard”, where the natural person controls the cash flows and is always ready to declare the enterprise bankrupt. As the alternative, G. Kleiner suggests system and integration enterprise theory, the base of which is the position of integrity and consistency of each commercial organization as the subject of property and management [7].

The scientific position of G. Kleiner opens the new aspects of the prolonged property transformation phenomenon, widely spread in conditions of the social and economic transformation. The new property “vacuum”, filled with the power, appears in the situation when the formerly ruled form of property loses the social positions in short terms of few days or weeks and the new developing form of property hasn't been formed yet and is not recognized by the society and affirmed in economical activities. Having the interconnection the power and the property solve the different problems, so this substitution is not equal and couldn't be carried out for any long time.

M. Tsurova develops G. Kleiner's ideas about the necessity of property relations protection in conditions of long-lasting economic transformation and finds out the new opportunities for substantiation the integral procedure of property protection in modern Russia. The author suggests the concrete and developed in details structure of property protection procedure, where she singles out:

- strategical planning of economical system relations development, which is the perspective and full realization of all the property opportunities;
- organization of civil society control of reproduction process, which provides the social responsibility of the power and property, overcoming the consequences and lowering the bureaucratization level in property relations (it should be pointed out that in many respects to the bureaucratization the process of prolonged property relations transformation is continuing);
- transportation symmetry of borrowed forms of economic relations and institutions to the internal environment of national economics. Ignoring this principle, the institutional asymmetry in the process of market transformations in modern Russian economics ap-pears abundantly;
- economic relations demonopolization, overcoming the segmentation of the market space, which prevent from the full realization of the property relations potential, and form-ing the necessary competitive environment;
- budgetation on the base of interconnection between the resources and the results of the economic processes, which lets the owners control the factors, resources and the external conditions of the processes;
- auditing the property relations, aim of which is to provide by means of account, analysis and ascertainment of the verity of economic information and conditions of enlarged property relation reproduction [8].

V. Deinega views the problem in another way – from the standpoint of the corporate property reproduction. The analysis of the institutional bases of the corporate property re-production helps the author to determine 3 main elements of this procedure:

- systematic development of the whole corporate relations system;
- balanced participation of the corporate relations subject in the incomes and the corporation development process;
- corporate property auditing [9].

I. Sugaipova accents on the system character of the property protection and critically values the detached and particular attempts in this way of research. She concludes that the particular arrangements are not effective in the terms of protection the system-defined property relations. So it is expedient to aspire to the creation of the integral property protection procedure as the core, which provides the economic relations system development on all the levels of its organization. At

the same time the content, structure, reproduction specificity and types of threats, which exist on the modern stage of Russian economics evolution, are taken into account [10].

Developing I. Sugaipova's idea, we should note that the most perspective way to search the land property protection procedure is as the dynamic mean of creation and approval of the new economic order and the subsequent effective land property system development.

Summarizing all the viewed theses, we can suggest the land property protection procedure, appropriate to the economic system. The procedure includes the next units:

A. *Transactional unit*. The purposes of the unit are:

- lowering of the economic and administrative barriers between the separate land market segments;
- bargain arrangements through the exchange mechanisms, which provide the relations clarity and lowering the transaction costs of the participants;
- institutional regulation of the participation rules on the market, which lowers the owners risks.

B. *Unit of account and registration of owners rights*. The purposes of the unit are:

- conduction the efficient procedure of the professional participants registration on the land market and creation of the appropriate participants list (federal and regional levels);
- confrontation of prices, which were proclaimed by the participants of the land bar-gain, with the results of the independent estimation.

C. *Unit of single rights transit from the massive of all land property rights*. The purposes of the unit are:

- obligatory auditing of the land property, which is held in effort to provide the reliable economic information;
- state expertise and land lease registration.

The schematic view of the structure can be seen on the fig. 1.

In institutional relation the main results of the property protection mechanism on the land market can be:

- lowering the redundant transactional expenses for the market, which are conditioned by the prolonged property transformation phenomenon;
- increase of the investment attractiveness of land as the investing subject;
- development of the complex contract forms on the land market, which are connected with the emission and turnover of special stocks, showing the land assets.

The structure of the given land property protection procedure complies with one of the key position of the institutional theory – the position of the massive of all land property rights. The procedure aims at the most problematic components of the massive on the Russian land market and helps to provide the systematic land property relation protection.

---

#### REFERENCES

1. Koroljuk EV Formation of economic contradictions of the land market as institutional and economic system. - Krasnodar LLC " Garnet ", 2011 .
- 2 . Locke J. Selected Philosophical Works . In 2 volumes V.2 . - M.: Thought , 1964 .
- 3 . A. Smith, An Inquiry into the Nature and Causes of the Wealth of Nations . - M.: Sotsekgiz , 1962 .
- 4 . Hegel, Sochineniya.T.7 . - L.: Gospolitizdat , 1957 .
- 5 . Sugaipova IV Methodology and technology audit of corporate ownership . - Rostov -on-Don : SKNTS VS 2006.
6. Ibid .
7. Kleiner GB Institutional aspects of the reform of industrial enterprises // The challenges of the theory and practice of management. - 2002 . - № 4 . - P.25 .
8. Tsurov M. The mechanism of protection of property relations // Scientific Thought Caucasus. - 2006 . - Special Issue number 3 . - P.21 -22.
9. Deynaga VN Reproduction of property in the system of corporate relations. Rostov- on-Don : SKNTS VS 2004 .
- 10 . Sugaipova IV Ordinance. Op.

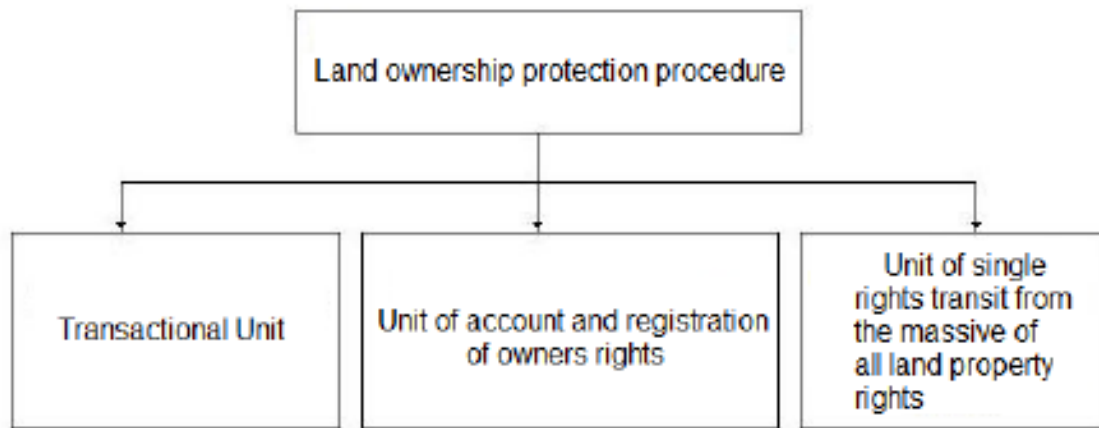


FIG 1. THE MAIN STRUCTURE BLOCKS OF THE LAND OWNERSHIP PROTECTION PROCEDURE

### THE STAGES OF WORKING OUT THE PROFESSIONALLY ORIENTED INFORMATIONAL TRAINING OF SPECIALISTS

**ABSTRACT.** THE AUTHOR SUGGESTS THE METHODS FOR WORKING OUT THE PROFESSIONALLY ORIENTED SYSTEM OF THE SPECIALISTS INFORMATIONAL TRAINING. THE AUTHOR DESCRIBES THE STAGES, THE CONDITIONS AND THE MEANS FOR DESIGNING THE EFFECTIVE EDUCATIONAL MODEL.

**KEYWORDS:** INFORMATIONAL TRAINING, PROFESSIONALIZATION, PROFESSIONAL TASKS, INTERDISCIPLINARY TASKS, INDEPENDENT STUDENTS WORK.

#### **GALINA NEKRASOVA**

DOCTOR OF PEDAGOGIC SCIENCES, PROFESSOR AT THE CHAIR OF THEORY AND METHODOLOGY OF TEACHING TECHNOLOGY, VYATKA STATE UNIVERSITY OF HUMANITIES

At the modern stage of education the professionals training upgrading is dictated not only by the new Federal standards, but also by the change of the professional assignment and functions of a specialist, which become complicated by the influence of society informatization. Computer and the Internet essentially influenced on the process of receiving knowledge: we can see the intensification of the educational process, the increase of the perception speed and the depth of mastering the huge amounts of information; the appearance of the mobility in getting the educational information by means of the distance forms of education. At the first stage of the computer equipment introduction to the educational process the approach to the informational training of specialists was the same in all educational institutions of the country: mastering the standard package of the software and execution of the simple operations with text and graphics. But the rapid information technologies development, the appearance of the specialized programs and new hardware, aimed for solving the professional problems in all spheres (for example, in medicine – tomographic scanner; 3D graphics in cinematography, television and animation; e-banking, etc.) demanded the corresponding specialized training of the university and college graduates.

Today's informational component is one of the most important ones in the system of specialists training in all spheres. Analyzing the Federal State Educational Standards, we can speak about the presence of such academic subjects, as "Computer Science" and "Informational technologies" in all curriculums without exception. It should be recognized that little attention is paid to this modern and important training component. However the research of the training materials to engineers-students and teachers-students shows that the training in different educational institutions is implemented by means of one and the same educational pro-grams, which do not concern about the specialization and professional orientation of students [1]. The content of the disciplines is the same for different specialties. The difference can be seen only in the quantity of hours, which are taken to the discipline mastering. As the result having the common informational grounding the graduate is not ready for solving the specific professional problems. The special attention should be paid to another aspect of the curriculum analysis, which shows that there are some hours for the supplementary subjects, which concern the students professional training. In the context of these hours students study specialized programs (future engineers study CAD systems, future economists study 1C program or

another specialized software). But in action this model of informational training usually is not effective, students receive separate knowledge and as the result, specialists are poorly oriented in the modern technologies of professional information processing.

At the modern stage of specialists training perfection the scientific and methodical problem of projecting the new educational technologies, providing the high quality of specialized training (including informational one), is very relevant. The idea is about the professionally oriented educational technologies, permitting to organize the educational process taking into account the professional orientation and the development of the professionally important features of character in a future specialist. This methodical problem is in the center of research among such researchers, as M. Vilenskii, T. Dmitrienko, P. Obraztsov, etc. These authors think that projecting the professionally oriented educational environment consists of the complex of actions, such as determination of diagnostic purposes of education, basis of the training content in the context of future professional activity of the specialists, detection the structure of the training material, its informational content and the system of notional connections between its elements, choice of the organizational forms, methods and means of individual and team educational activities, and also of the control and quality of programs [2].

In numerous researches the process of professionally oriented training of a future specialist is identically connected with the professionalism problem. It is viewed within the interconnection of the whole educational components and determined as the effective training process, which promotes the development of the person's professional activity and formation.

The algorithm of working out the effective informational training system is given below. It is based on the scientific approaches, described in professionally oriented education concepts, and longstanding author's research, devoted to the professionalism of technology teachers and clothing industry engineers.

1. The first stage of educational system planning on informational training is the analyses of the specialist's professional activity and revelation of professional tasks, solving which the various means of information technologies are used. The structure, functions and professional requirements are describes in profессиogram (the document, where the main specialist's features of the concrete profession are given). The profессиogram consists of:

- 1) professional knowledge (volume and structure of general and special training);
- 2) professional qualities (discipline, responsibility, honesty, initiative, purposefulness, etc.);
- 3) psychological and personal qualities (motivational orientation, mentality level, emotional and mental stability, interpersonal behavior).

At this planning stage there are difficulties, connected with the absence of the sufficient description of the whole three components, related to information technologies, in profессиogram. The use of informational technologies is the brand new branch in worker's activity, so many profессиograms do not consist this information. In this case the analysis of the entire professional activity system is carried out, generalized (complex) professional tasks and problem situations are singled out, they determine the content of specialist in-formation technology training. After that the minimum necessary and sufficient for information technology knowledge and skills is defined. The minimum is compared with the educational programs. The comparative analysis is essential for the training content update, because the educational programs, especially information technology and computer science programs, rapidly become obsolete and information technology as a branch rapidly develops, vastly excelling the educational process.

2. The next planning stage is decomposition of complex professional tasks on the concrete professional actions. (It should be mentioned that the new Federal State Educational Standards contain the notion "professional competences". The author of the article doesn't see the essential difference between this term and the term "professional actions" and doesn't ground this opinion). On the base of professional actions the educational tasks complex, modelling the professional activity, is elaborated. These tasks can be used either in mastering the discipline or in supplementary courses, strengthening the professional training in this direction.

The independent students work, as the interactive educational form, plays the big role here. Concerning the students information technology training the organization of independent work (especially for supplementary courses) has the next specified methodological peculiarities.

1) The independent students work is the form of educational activity in conditions of the limited material resources and the lack of time (in curriculums the small amount of time is given for special disciplines).



2) The huge volume of information can be mastered only in case when the students work either on classroom or on individual studies.

3) Doing the professionally oriented tasks, students create the practically important informational products and master the theory.

4) The elaboration of the new special discipline courses happens with the students help. In this case the process of mastering the educational discipline has the leading nature.

3. The important role in successful specialist professionalism plays the interrelation between all educational disciplines. For students complex toolset usage while modeling the professionally oriented courses it is necessary to single out the information component of interdisciplinary relations in. The interdisciplinary tasks system is worked out on the base of the revealed relations. The tasks should:

- provide the continuous and complex mastering of theoretical knowledge and practical skills of using the means of information technology during the whole training period;
- be connected in one system considering the succession of getting knowledge;
- show the great variety of interrelations, permitting to integrate the knowledge from different educational disciplines;
- have the content, oriented on the concrete professional problems;
- have the gradual complicity rise, in the final tasks students should use the creativity to solve them;
- be in different forms of educational activity (group work, small group work, individual work);
- have the leading character, because of the availability and rapid development of information technology means, means of automation and technology process informatization.

4. The complex of activities, developing the future specialist creativeness and forming the innovative attitude to the professional activity changes, should be worked out further to the individual tasks system. The innovative attitude is especially important in perception and mastering the brand-new hardware and software.

It was ascertain that the effective tool for creative potential development is scientific researches, organized in conditions of interconnection between the educational institution and enterprises. The success research work allows to provide the integrate effect of educational, professional and scientific environment on the student's personality and stands the precondition of worker deliberate professional formation. The research work should be provided by the approbation and implementation of the innovation in real professional conditions. It helps the students to extend the knowledge and experience from the educational situation to the real life, to be ready to solve the future unusual professional problems and to form the positive innovative thinking.

In the conclusion, it should be mentioned that the professionally oriented training in information technology sphere requires the constant update, because of the new professional tasks, appearing within the information technology development. The author's method of the professionally oriented system working out of specialists information training was based of the scientific and theoretical analysis of the problem and the results of the experiment. To realize the system:

1) The interconnection between the various components of specialists training, based on the structure and content analysis of standards and curriculums, which determine the worker training process, should be found out and the professional activity should be analyzed;

2) The basic educational components of information technology training should be determined. The components help students to receive the necessary complex of knowledge and skills and to be prepared for professional problems solving using the means of information technology.

3) The directions and tools of information technology professionalism should also be determined. The most effective of them are:

- development of professionally oriented special courses;
- working out the interdisciplinary knowledge complex;
- education personalization by means of the development of varied tasks for individual students work (which can be solved by using either patterns or students creative potential);
- choice of the professionally important information for practical mastering;
- organization of scientific researches in the sphere of innovative informative technologies.

In the end following the necessary pedagogical requirements, the didactic activities listed above will form the graduates readiness for successful professional tasks solution, using hardware and software, and form the innovative behavior of a future specialist.

## REFERENCES

1. Nekrasova, G. N. (2004) *Technology teacher training for professional activity with the use of information technology methods (Podgotovka uchitelja tehnologij k ispolzovaniju sredstv informacionnyh tehnologij v professional'noj dejatel'nosti)*. "Shkola budushhego" Publ., Moscow, 246 p.
2. Slastenin V.A. (Ed.), Vilenskij, M.Ja., Obrazcov, P.I. and Uman, A.I. (2004) *Technology of professionally-oriented education in higher educational institutions (Tehnologija professionalno-orientirovannogo obuchenija v vysshej shkole)*. "Pedagogicheskoe obshchestvo Rossii", Moscow, 192 p.

**THE PECULIARITIES  
OF THE PHRASE "ORANGE REVOLUTION"  
IN ENGLISH SENTENCES**

**ABSTRACT.** THE ARTICLE IS DEVOTED TO THE QUESTIONS OF THE PHRASE "ORANGE REVOLUTION" FUNCTIONING. THIS PHRASE HAS TWO MEANINGS AND ACCORDING TO THESE MEANINGS THE AUTHOR DESCRIBES THE POINTERS, WHICH HELP READERS TO GUESS THE RIGHT MEANING OF THE PHRASE. THE RE-SEARCH IS MADE WITHIN THE CORPUS LINGUISTICS.

**KEYWORDS:** ORANGE REVOLUTION, PRECEDENTIAL PHENOMENON, CORPUS LINGUISTICS

**MARIA BUDINA**

PHD STUDENT, THE CHAIR OF GERMANIC LANGUAGES, VYATKA STATE UNIVERSITY OF HUMANITIES

The Orange Revolution, which took place in the Ukraine in 2004, is the word internationally known to all contemporaries. But the distinctive feature of phrase "orange revolution" (below in the text – "or") is that it became a precedential phenomenon (the concept in Russian philology, that means the word or phrase known to each representative of one or another linguistic-cultural community) and now the phrase has two different meanings: 1. The event in the Ukraine in 2004; 2) Some "reference", "ideal" situation with the concrete connotations [2, c. 151]. I.e. having heard the phrase "or", a person, first of all, think about the events in the Ukraine. But in the concrete context the meaning of it changes and "or" in person's perception turns into the universal "model", where only the important features are emphasized. The 'or' is associated with any coup d'état in present regime (or direction) either in a country/region or in any institution. However, at the same time other significant characteristics of "or", e.g. the declaration of the election returns invalid or numerous mass-meetings and protest actions, held in the Ukraine during two month after the presidential elections, are in the background. In our previous research we gave two variants of spelling the phrase "or" in the Russian language and it depends on the meaning of the phrase:

1) If it concerns the Ukrainian events, the word "Orange" is spelled with the capital letter and the word "revolution" – with the small one. Both words should be written without quotation marks (Orange revolution).

2) If we concerns the precedential phenomenon, both words should be written with the small letters and with quotation marks ("orange revolution") [1].

The object of the research in this article is the phrase "or" in the English language and especially in American English and British English. To find out how the phrase functions in the language, we analyzed four corpora of the English language:

- 1) Corpus of Contemporary American English (COCA) [3];
- 2) Corpus of Web-based English (GLOWBE) [5];
- 3) British News [6];
- 4) TIME Magazine corpus [4].

As the result we singled out 230 English sentences, containing the phrase "or", from 110 unique sources (both printed media and the Internet) of various countries such, as the USA, Canada, Great Britain, Australia, New Zealand, etc. Because of these sentences the functioning of the phrase "or" in English can be described in details.

As in Russian, the form of spelling the phrase "or" in English is of the particular interest. We can see many variations in writing, but unlike the Russian language, where there are discrepancies in letter case and quotation marks, in the English language besides the discrepancies listed above there is an ambiguity in using articles. There are 13 variations of spelling the phrase "or", the most prevalent one is – the Orange Revolution (44,10% from the general number of sentences) and it is obvious, because it is accepted to write the names of the historical events from the capital letters with the definite article "the" (e.g. the American Civil War, the War of the Roses). However, we can see other spelling variations:

- With the indefinite article (3.93%);
- With zero article (27.51%);
- Both words are in quotation marks (24.89%);
- Both words are from the small letters (20.96%);
- The word "revolution" is from the small letter (6.11).

The reason of this variations is hidden in two different meanings of the phrase, which were described above; 1) The Orange Revolution in the Ukraine in 2004; 2) "or" as the precedential phenomenon. Relying on these meanings, the peculiarities of the phrase "or" in English language can be viewed. In the previous research we singled out the "so-called" markers, which help the readers to identify the correct meaning of the phrase in the sentence.

### The Orange Revolution in the Ukraine in 2004

In the sentences, where the phrase "or" is used in the meaning of the historical and political event, five different markers can be distinguished:

1. The authors use the subordinate clauses, which describe the most significant feature of the event in the concrete context (19.02%).

*Moscow says Kiev should follow the logic of the "Orange Revolution", in which Ukrainians broke free from Russian influence, and accept that the days of Soviet-era energy subsidies must end.*

*In the 2004 Ukrainian presidential election, Yanukovich, who was then Ukraine's prime minister and the handpicked successor to President Leonid Kuchma, was accused of fraud and ousted by the Orange Revolution, which was led by Viktor Yushchenko and Yulia Tymoshenko.*

2. The authors use the marker, which points to the place, where the revolution was held (29.45%). The marker can show on the geographical place of the Orange Revolution, e.g. country or city. Both the possessive case of geographical names, as "Ukraine's" or "Kiev's", and the preposition "in" can be used. The geographical name in the sentence can be as a noun, as an adjective.

*I was speaking with the benefit of experience in seeing a democratic movement evolve when we were in close contact with many of those involved in Ukraine's Orange Revolution.*

*Nashi was designed to prevent a Russian version of the 2004 Orange Revolution in Ukraine, where youth opposition activists played the central role in the protests that forced a rigged presidential election to be rerun, leading to the victory of Putin antagonist Viktor Yushchenko.*

*This we saw clearly in the "Orange Revolution" in Kiev of winter 2004-5, led by Yushchenko and his American wife.*

The marker can be presented with such words, as "country's", "Yushchenko's", "his", etc., which also refer the reader to the Ukrainian events.

*From Russia's perspective, U.S. support for Viktor Yushchenko's Orange Revolution was not just about promoting democracy; it was also about under-mining Russia's influence in a neighboring state that had joined the Russian empire voluntarily in the seventeenth century and that had both significant cultural ties with Russia and a large Russian population.*

3. The authors use the marker, which points to the time limits of the event (32.52%) The most widely spread variant is mentioning the year 2004, when the revolutionary events were at their culmination, but also the words "recent", "last year", "8 years ago", etc. are used in this type of sentences.

*It is often forgotten that Ukraine's bid to join NATO was made before the 2004 Orange Revolution that ushered in President Viktor Yushchenko, a vocal and determined advocate of NATO membership for Ukraine.*

*Ukraine, which broke free of Moscow's orbit in last year's "Orange Revolution", was hit last month with more than a quadruple price hike for natural gas supplies - from \$50 per 1,000 cubic meters to \$230.*

4. The authors use the phrase "or" in combination with the other analogous political events and compare them (14.72%). First, the names of the other colour revolutions are used, such as the Rose Revolution in Georgia, the Tulip Revolution in Kyrgyzstan, the Cedar Revolution in Lebanon.

*The Rose Revolution happened in the nation of Georgia in 2003 because people knew their election had been stolen, and so did those who joined the Orange Revolution in Ukraine last year.*

*Unsurprisingly, the thrill of that victory led to the next two' cyber wars' - Orange Revolution in the Ukraine in 2004 followed by the Tulip Revolution in 2005.*

*At last there was a democratic "cedar revolution" to match the US-backed Ukrainian "orange revolution" and a photogenic display of people power to bolster George Bush's insistence that the region is with him.*

Also there are the references to the other political events, e.g. the March on Washington in 1963, the breaching of the Berlin Wall in 1989, the Green Revolution in Iran, the Velvet Revolutions in the Eastern Europe in 1989, etc.

*If we're very lucky, we've experienced moments of collective elation like the March on Washington in 1963, the breaching of the Berlin Wall in 1989, the Orange Revolution in Ukraine in 2004, or the Arab Spring in Cairo's Tahrir Square more recently.*

*In his most recent book, Defeating Dictators, George takes a hard look at the fight against dictatorships around the world, from Ukraine's orange revolution in 2004 to Iran's Green Revolution last year, and examines what strategies worked in the struggle to establish democracy through revolution.*

*However, you should learn from those courageous nations as (the revolution of jasmine in Romania, the Ukrainian orange revolution, the romantic revolution in Georgia, the Solidarity revolution in Poland, and other peaceful revolutions as happened in Czechoslovakian and Hungary and Bulgaria).*

5. The fewest marker is the usage of the phrase "so-called" before "or" (4.29%). The Oxford dictionary interpret the "so-called" as: "...used to show that something or someone is commonly designated by the name

or term specified" [7]. Using the marker, the author emphasizes the fact, that the phrase "or" existed before and he/she doesn't invent it by him/herself, but the name of the event will probably become historical.

*Ukraine took due notice, and the so called "Orange Revolution" has since been reversed.*

It is interesting to note that the markers are presented only in 54.11% of the sentences, it can be explained by the fact that the meaning of the phrase "or" can be easily guessed in the sentences without the markers (e.g. *Ukrainians were damning about the failure of the Orange Revolution's leaders to deliver on their promises.*). Most often the names of politicians, who took part in the Orange Revolution (e.g. Viktor Yanukovich, Viktor Yushchenko or Yulia Tymoshenko), appear in the sentences without the markers. Also the words "Ukraine", "Ukrainian", "the Ukrainians", names of the political parties ("Nashi") and any kind of mentioning of Russian and American leaders and government can be found in this type of sentences.

#### **The precedential phenomenon "orange revolution"**

English speaking authors seldom use the phrase "or" in this meaning and describe other political and social events by it. So the percentage is 90.39% of the first meaning of the phrase (the political event) and 9.61% of the second meaning (the precedential phenomenon). In the Russian language the same percentage is 70.11% to 29.89% [1]. The Russian media is oversaturated with the precedential phenomenon "or": "or" in post soviet space, Iraq, the Altai Region in Russia, Zimbabwe, and even in the Ukrainian football and Russian church. In the English media the precedential phenomenon "or" is used much more rarely and describes the political events, analogous to the Ukrainian one, in other countries. In this type of sentences only two markers can be singled out.

1. The authors use the marker, which points to the place, where the revolution was held (20.77%). The marker also shows the geographical place of the event, analogous to the "real" Orange Revolution. So in the sentences we can meet the "or" in Russia, Iran, Quebec, etc., which were also based on the results of the "unfair" election results.

*An orange revolution in Iran would be very helpful indeed.*

*As the congress drew to a close, I ran into a Russian friend who wanted to know whom she should call in Washington to get advice on launching an "orange revolution" in Russia.*

2. The authors use the standard set of the words together with the phrase "or" (61.54%). These words help the reader to understand the right meaning of the phrase "or". Here such words as "own", "a Ukrainian-style", "a second", etc., can be found.

*IF YANUKOVYCH keeps on his current course, he could very well provoke a second Orange Revolution.*

*"They fear a Ukrainian-style Orange Revolution will break out if they let people ex-press themselves," Mr. Ryzhkov said.*

In the Russian sentences another 2 markers were singled out along with these markers: the marker of time and negative type of sentence. In the English sentences these markers weren't found.

Only 59.09% of the sentences with this meaning contain any marker. It can be clearly seen in the table 1 the percentage of the markers in both types of sentences.

TABLE 1  
THE QUANTITY OF MARKERS IN THE SENTENCES WITH THE PHRASE "OR"

<i>The quantity of markers in the sentence</i>	<i>The event in the Ukraine, %</i>	<i>The precedential phenomenon, %</i>
Zero	45.89	40.91
1 marker	35.75	59.09
2 markers	12.56	0.00
3 or more markers	5.80	0.00



TABLE 2  
THE PERCENTAGE OF MARKERS IN THE SENTENCES WITH THE PHRASE "OR"  
IN THE RUSSIAN AND ENGLISH LANGUAGES

<i>The event in the Ukraine</i>			<i>The precedential phenomenon</i>		
<i>Marker</i>	<i>Russian, %</i>	<i>English, %</i>	<i>Marker</i>	<i>Russian, %</i>	<i>English, %</i>
Subordinate clause	12.8	19.0	Negative sentence	14,7	7.7
Place	62.2	32.5	Place	48	30.8
Time	16.8	29.5	Time	3.6	–
Political events	8.2	14.7	Set of standard words	33.7	61.5
Set of standard words	–	4.3			

### Conclusion

Table 2 summarizes the research data of the phrase "or" functioning in Russian and English.

It is obvious that in both languages the phrase "or" has two meanings: 1. The event in the Ukraine; 2. The precedential phenomenon.

In both languages, the sentences with the phrase "or" were viewed. In spite of the prevalence of the precedential phenomenon "or" in Russian, in both languages the most sentences use the phrase in the meaning of the Ukrainian event. The markers, which were singled out in both meanings, help to determine the correct meaning of the phrase in the sentence. I.e. the phrase "or" in the meaning of the political event functions with the help of four markers in the Russian sentence and five markers – in the English ones. The most widespread marker in both languages is the place marker, and then the time marker goes. But in the English language the frequencies of time and place markers are almost same, while in the Russian language the time marker is used noticeably much more seldom than the place marker (in four times). In Russian, there is no marker as "set of standard words" in the first meaning of the phrase. It can be connected with the fact that the English authors use the phrase "so-called" to describe the events in the Ukraine, while the Russian authors describe the precedential phenomenon using the same phrase. That is why we can see the marker "set of standard words" in Russian language in the second meaning of the phrase. Speaking about the meaning of the precedential phenomenon, we can see that the functioning of the phrase is highly different in the languages: in Russian the most widely spread marker is place marker, in English – set of standard words. Also the quantity of markers in the languages differs: there are four markers in Russian and three – in English (one of which is represented by the only one sentence).

We can conclude that the phrase "or", which historically appeared as the name of the revolutionary actions in the Ukraine in 2004, obtained one more meaning in Russian and English as the result of the increased interest of the world community, and in particular of the Russian and American ones, to the events in the Ukraine.

### REFERENCES

1. Nekrasova ME "Orange Revolution" as an event and as a precedent phenomenon (according to RNC) // Vestnik TSU. Series Philology. - 2013. - № 5. - With. 251-258.
2. Yuri Prokhorov Reality. Text. Discourse. - M. Flint, Science, 2009. - 224.
3. Davies M. (2008) The Corpus of Contemporary American English: 450 million words, 1990-present. – URL: <http://corpus.byu.edu/coca>.
4. Davies M. (2007) TIME Magazine Corpus: 100 million words, 1920s–2000s. – URL: <http://corpus.byu.edu/time>.
5. Davies M. (2013) Corpus of Global Web-Based English: 1.9 billion words from speakers in 20 countries. – URL: <http://corpus2.byu.edu/glowbe>.
6. British News (2004).– URL: <http://corpus.leeds.ac.uk>.
7. Oxford Dictionaries.– URL: <http://oxforddictionaries.com>.