

Need of the Market Principles of Development of the Economic Relations for the Sphere of Educational Services

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Abstract: Problems of modernization of the educational system are examined through the prism of main principles of quality education, different orientation on the formation and development of student's creative potential, his individuality and creativity. The position of the economy of particular importance in creative education is given to methods of generating new ideas, solutions to non-standard problems. Therefore, we need new economic relationships, creating sufficient market potential development of promising forms of education. The purpose of the study is to analyse the effectiveness of traditional finance education and systematization of fundamental theoretical and practical principles of forming a new system of economic relations in the sphere under consideration of the national modernization.

Key words: Education, creative education, spending on education, economic relations, universal electronic map

INTRODUCTION

Now, when it comes to the need for reform of modern education, the almost universally accepted was the provision on limitations of traditional education which does not allow for the formation of creativity and creative personality. Most researchers noted that traditional learning paradigm promotes student have lack of initiative, reproductive thinking, intellectual passivity and consumer relations.

As a result, in today's job market there is an acute shortage of talented and creative parties. The traditional approach to teaching students have not generated the methodology of creativity and, consequently, do not develop the ability to professionally-creative activities, all of which leads to a decrease in the quality and effectiveness of education, however, undermined the basis of forming the modern development of the knowledge society.

MATERIALS AND METHODS

The principal methods of analysis were the theoretical definition of priority development trends of

modern education, the calculation correlation between dynamics of gross domestic product and a number of key indicators of educational development, analytical and constructive synthesis.

Main part: The fundamental principle of quality education at present his focus on the formation and development of student's creative potential his individuality and creativity. The position of the economy of particular importance in creative education is given to methods of generating new ideas, solutions to non-standard problems (Chapayev and Choshanov, 2011) the formation of new combinations of knowledge, skills products (Kodzhaspirova, 2012) raising the level of creative gifts and ability to create (Vagin, 1996).

In addition, creativity implies a subjective cognition of individual semantic essence of the surrounding world and objective reality, without assuming the creation of real, tangible product. The result of the creative process is expressed in the formation of identity, creating a unique human individual psyche and emotional characteristics, increasing sensitivity to the problems, shortages or inconsistency of knowledge, the definition of these

problems, the search for solutions by nominating, audit and change hypotheses, formulation of result of decision. Next, the researchers stressed that it is in the context of the information society and the knowledge economy, it becomes possible to merge creative and creative components (Ryabyh and Mezhuyeva, 2014).

At the present stage of development of creativity are dealt with in the framework of the idea of “global creativity” (Ostroumov and Ostroumova, 2013) which demands adequate capacity for the permanent creation of new skills, reflecting the basic structural components of creativity of personality (Makarushina, 2011).

In such circumstances, the effectiveness of entrepreneurship defines susceptibility, sensitivity to new ideas and a tendency to destroy or modify stereotypes in order to create a new product, get non-trivial, unexpected and unusual solutions to the economic problems (Morozov and Chernilevsky, 2004).

The main objectives of creative education system are in development in individual creativity, nurturing the courage of thought, self-confidence, the creative lifestyle, ability to generate new and exciting ideas based on universal values and careful attitude to nature (Zaynullin, 2012; Shubinsky, 1988).

Generally on problems of the education system they say decades. So, back in the sixties of the last century finding unsatisfactory in this sphere and the deepening of the crisis. With the first postwar years in the United States, Britain, France and others, at the legislative level, attempts are being made to reform the education system. The fact that the decline in the quality of education regularly recorded in national reports to United States 1983 that points to the need for a profound transformation of the sector as well as the inefficiency of activities to improve the quality of the educational process. In general terms, the crisis of the world educational system can be expressed through strengthening of the contradictions between the ever-changing needs of modern society and the results of education (Tatuyev, 2012). In the global settings of this crisis has a predominantly economic framework which determines the ability of the education system and makes the ever-changing requirements for the results of its operations.

In this context, it is necessary to take into account emerging elements of new relations of knowledge economy, defined as an economy based on intensive and efficient use of knowledge (Pavlenko, 2013). It is understood the State of the economy when, firstly, knowledge turns into a full-fledged product, secondly the vast majority of goods and services have unique knowledge, thirdly, knowledge of the Act a priority factor of production (Kleyner, 2006).

Table 1: Calculation of benchmark deflators Russia’s GDP in the period from 2000-2014 years of year 2000*

Years	Indices-GDP deflators, in the previous year (%)	Indices-GDP deflators, in the year 2000 (%)
2000	137.6	100.0
2001	116.5	116.5
2002	115.6	134.7
2003	113.8	153.3
2004	120.3	184.4
2005	119.3	220.0
2006	115.2	253.4
2007	113.8	288.4
2008	118.0	340.3
2009	102.0	347.1
2010	114.2	396.3
2011	115.9	459.4
2012	107.5	493.8
2013	105.0	518.5
2014	107.2	555.8

*Table has been designed and compiled by the author on the basis of data from national accounts//official website of the Federal State statistics service. URL by: http://www.gks.ru/free_doc/new_site/vvp/tab4.xls

Notable is and international approach, according to which existing ideas and concepts in the field of science and innovations are integrated into one conceptual system (Godin, 2003). Knowledge economy means more than just new boundaries of knowledge, it means building new forms of production through rational and systematic use of all kinds and types of knowledge in all spheres of economic activity (Bagrinovsky and Isaeva, 2002). In this context, the situation in Russia is one of the most difficult. First of all, because in our country there are some of the biggest relative parameters of the educational system, different magnitude of coverage at all levels.

For example, according to the annual review of the main indicators of the OECD in the field of education, Canada, Korea and the Russian Federation are leading among OECD member countries and the G20 countries, the share of young people (25-34 year) with higher education (Yeliseyeva, 2010) (Table 1).

In view of the fact that in the most developed countries of the world there is a link between the level of public expenditure on education and economic development level, it seems interesting to explore the relationship between these factors exclusively in Russia. To do this, you can compare the changes in the rate of growth of the national economy and public expenditure on education over a period of time for example by the year 2000 and the present.

RESULTS AND DISCUSSION

To obtain comparable series will make the calculation of the baseline growth rates of GDP and total government expenditure on education in Russia in the prices of the

Table 2: Calculation of baseline GDP growth and Government expenditure to education in Russia in comparable prices, in% to the year 2000*

Years	GDP at market prices (bln. rub.)	Public expenditure on education in basic prices (bln. rub.)	GDP in the year 2000 prices (bln. rub.)	Public expenditure on education in the year 2000 price (%) (bln. rub.)	The basic GDP growth rate, to the year 2000	The basic rate of growth of public expenditure on education in the year 2000 prices, in the year 2000 (%)
2000	7305.6	214.7	7305.6	214.7	100.0	100.0
2001	8943.6	277.8	7676.9	238.5	105.1	111.1
2002	10830.5	409.4	8042.0	304.0	110.1	141.6
2003	13208.2	475.6	8618.2	310.3	118.0	144.5
2004	17027.2	593.4	9235.3	321.9	126.4	149.9
2005	21609.8	801.8	9824.7	364.5	134.5	169.8
2006	26917.2	1036.4	10623.0	409.0	145.4	190.5
2007	33247.5	1343.0	11530.1	465.7	157.8	216.9
2008	41276.8	1658.1	12131.0	487.3	166.1	227.0
2009	38807.2	1783.5	11181.6	513.9	153.1	239.3
2010	46308.5	1893.9	11683.8	477.8	159.9	222.6
2011	55967.2	2231.8	12183.6	485.8	166.8	226.3
2012	62218.4	2558.4	12599.5	518.1	172.5	241.3
2013	66190.1	2888.8	12765.5	557.1	174.7	259.5
2014	71406.4	3037.3	12846.5	546.4	175.8	254.5

*Table has been designed and compiled by the author on the basis of data from national accounts//official website of the Federal State statistics service; URL: http://www.gks.ru/free_doc/new_site/vvp/tab4.xls; the Russian statistical year-book compilation: 2010.-m. :Rosstat, 2010.-s. 591-592; the Russian statistical year-book.: 2013 statistics.-m. : Rosstat in 2013; the Russian statistical year-book.: statistical compendium 2014.-m.: Rosstat in 2014

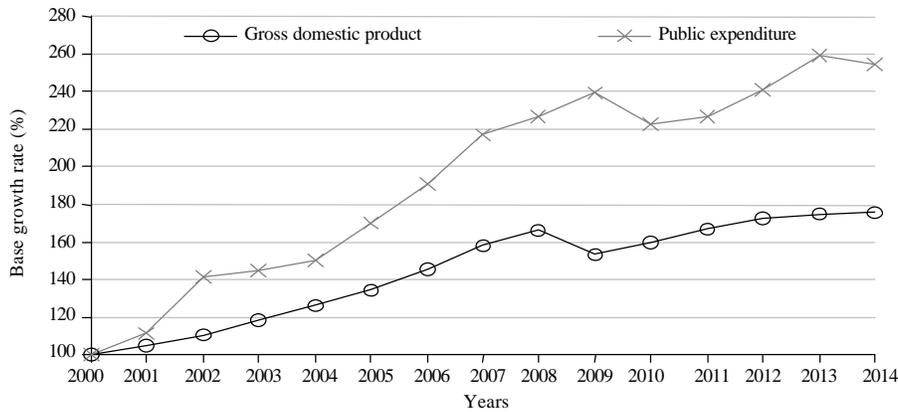


Fig. 1: Comparison of the basic rate of growth of GDP and public expenditure on education in Russia in the period from 2000-2014 (charts compiled by the researchers based on data from Table 2)

base period. In the original access to official resources available on the amount of public expenditure on education in main market prices. Also available is information about the volume of gross domestic product at basic prices. To detect real Dynamics data values of indicators should be adjusted for inflation changes. To do this, Table 2 shows the values deflators of GDP over a period of time in percentage to the previous year. Based on these basic calculation was made of the deflators Russia's GDP in the period from 2000 to 2014 years in% of the reference year. Fig. 1 Comparison of baseline GDP growth and Government expenditure to education in Russia in the period from 2000-2014 years (charts compiled by the author on the basis of data: Table 2).

On the basis of benchmark deflators Russia's GDP (Table 1) modify the values of the rows in the main market

prices from Table 2. This will get data on gross domestic product and the amount of public expenditure on education, expressed in the prices of the base year (year 2000). Then, on the basis of the obtained values of mapped indicators, removed from the inflationary component, it is possible to calculate the benchmark base rate of GDP growth and the rate of growth of public expenditure on education in the year 2000 prices are expressed in% compared to the year 2000. The results of these calculations are also listed in Table 2.

Figure 1 presents the results of the calculation of baseline GDP growth and Government expenditure to education in Russia in the period from 2000-2014 year produced above. Comparison of dynamics of these indicators allows us to reveal the fact that the actual amount of public spending on education over a period of

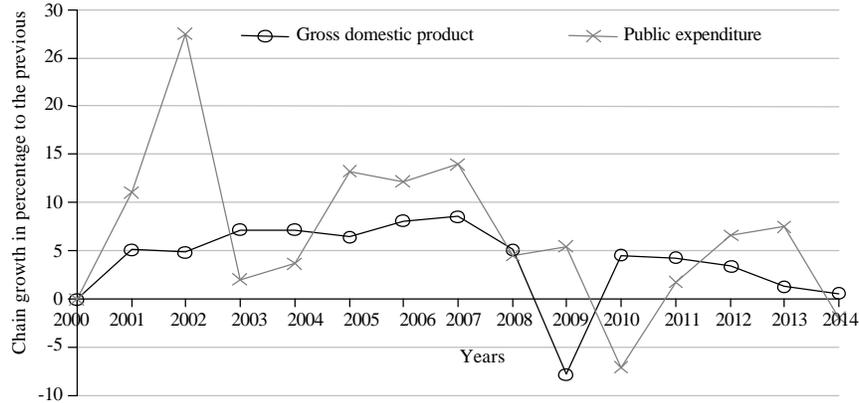


Fig. 2: Comparison of chained GDP growth and Government expenditure to education in Russia in the period from 2000-2014 (graphics designed and compiled by the researcher based on the data in Table 2)

time grew significantly more than the size of an economy. So, the size of the national economy grew by 75.8%. And, the amount of public expenditure on education 154.5% almost twice as much.

In addition, a comparison of the nature of the dynamics of values considered indicators do not allow for Parallels. So, in Fig. 2 provided that illustrates how to change the chain GDP growth and Government expenditure to education in Russia in the period from 2000-2014 year. From the Fig. 2, it can be seen that in the year 2002, there has been a sharp increase in public expenditure on education. However, the fact that virtually no impact on the changing dynamics of the GDP. Then, in 2003-2004 year of slowdown the growth of public expenditure on education. And the dynamics of growth of the economy has not changed. Similarly, the situation has evolved and in subsequent years up to the year 2008. Increase the volume of spending on education does not lead to economic growth and decrease-to-decrease. At the same time, you notice that partially dynamics of public expenditure on education was accompanied by last year's changes in the dynamics of GDP growth.

Check this fact, after analysing the correlation between indicators considered relevant series shifted to the left by 1 year. In Fig. 3, the top graph illustrates the correlation between GDP growth and chain volume of public expenditure on education in Russia in the period from 2000-2014 year second shift (Government spending) to 1 year left. As you can see, the nature of the changes the pattern of expenditures largely replicates the dynamics of changes in the economy.

In order to give a quantitative description of this fact, calculates coefficient of linear correlation between the values submitted. We will use the tools of the table editor

MS Excel and built into it CORREL function. "Make the table editor sheet in MS Excel series values that reflect the values of the chained GDP growth and Government expenditure to education in Russia in the period from 2000-2014 year. Move one year left, a number containing values of chain volume growth of public expenditure on education to calculate correlations between the series, we will use the CORREL function.

As a result of applying this function we will get the value of the linear correlation coefficient "r" equal to 0, 6ed. This value characterizes received communication as communication medium strength, i.e., it turns out that really, in some cases, changing the size of public spending on education is attributable to changes in the economy last year.

Given the results, evaluate the possibility to influence last year's spending on education to ongoing changes in the economy (Yeliseyeva, 2010). In Fig. 3, the lower graph shows the correlation between GDP growth and chain volume of public expenditure on education in Russia in the period from 2000-2014 year with a shift of the first series (GDP) to 1 year left. Visual score ranges displayed in the graph, lets talk about the absence of a pronounced relationship between changes in the values of the data series. For the argument made by the conclusion of the calculate coefficient of linear correlation. In the same manner as was done above, make the value of series considered with a shift to the left by 1 year values reflecting chain GDP. Then, use the built-in table editor MS Excel function to calculate the linear correlation coefficient CORREL ".

As a result of applying this function we will get the value of the linear correlation coefficient "r" equal to 0, 3ed., this value describes the resulting link as weak, i.e.,

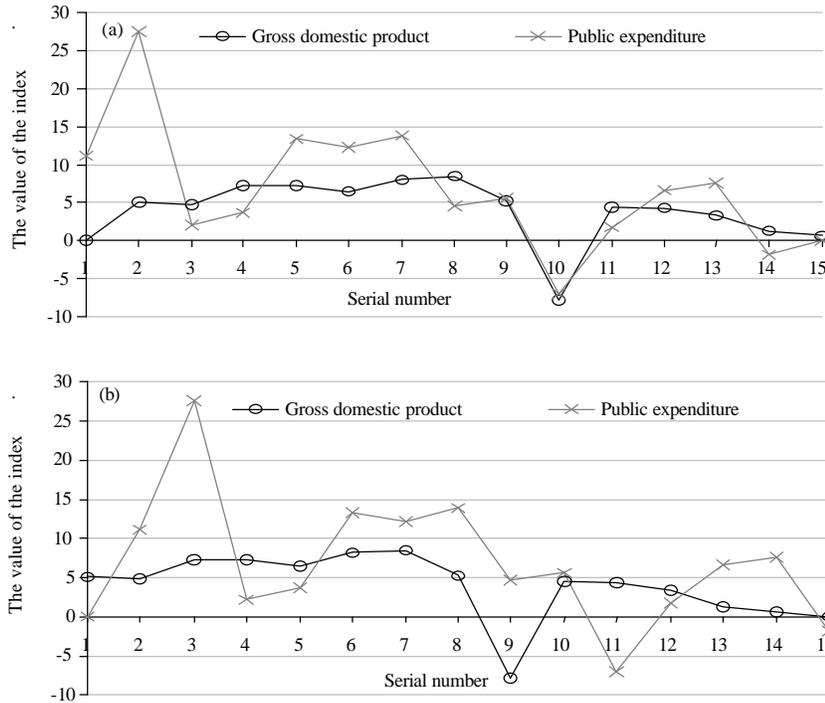


Fig. 3: The correlation between GDP growth and chain volume of public expenditure on education in Russia in the period from 2000-2014 year relevant series shifted to the left (the graphics are designed and made by the researcher on the basis of data Table 2): a) Public expenditure “-1”; b) Gross domestic product “-1”

the change in the size of public spending on education in the previous year has virtually no effect on the current changes in the economy.

Thus, on the one hand, it turns out that over the last decade, the size of the public expenditure on education rose at a faster pace of the economy. With spending on education exceeded the dynamics of economic growth almost in 2 times. On the other hand, a clear link between increased public expenditure on education and economic development dynamics install fails. The only really traceable link is the link dictated by budgetary process. Namely, addition education expenditure from the budget, which in many respects are determined by the historical parameters of the economic situation.

Despite the fact that you can't determine the extent to which spending on education on economic development, try to consider this task in a different plane. Consider the relationship between the level of expenditure on education and any socio-economic parameter which defines the standard of living of the population. For example, take the income level of the population.

Comparable changes in the rate of growth of per capita income and government expenditure to education in Russia for a specific period of time-from 2000-2014 year. To obtain comparable series will perform the calculation

basis the average per capita income growth of the population and the amount of public expenditure on education in Russia in the prices of the base period. In the original access to official resources available on the amount of public expenditure on education in main market prices. Also, available is information on the average per capita income in major market prices. These values are presented in Table 3. To detect real Dynamics data values of indicators should be adjusted for inflation changes.

Table 1 shows the values of benchmark deflators Russia's GDP in the period from 2000-2014 year percentage of year 2000. Given the benchmark deflators modify the series values in basic prices from Table 3. This will provide data on the average per capita income of the population and the amount of public expenditure on education, expressed in the prices of the base year (year 2000). Then, on the basis of the obtained values of mapped indicators, removed from the inflationary component, it is possible to calculate the basic growth rate per capita income and the benchmark rate of growth of public expenditure on education in the year 2000 prices are expressed in percentage compared to the year 2000. The results of these calculations are also listed in Table 3.

Table 3: Calculation basis the average per capita income growth of the population and the amount of public expenditure on education in Russia in comparable prices, in percentage to the year 2000*

Years	Average incomes in major market prices, rub. per person per month	Public expenditure on education in basic prices (bln.)	the average per capita income in year 2000 prices, (rub) rub per person per month	Public expenditure on education in the year 2000 prices, (bln. rub)	the benchmark average per capita income of the population growth in the prices of 2000 (%)	The basic rate of growth of public expenditure on education in the year 2000 prices, in the year 2000 (%)
2000	2281.1	214.7	2281.1	214.7	100.0	100.0
2001	3062.0	277.8	2628.3	238.5	115.2	111.1
2002	3947.2	409.4	2930.9	304.0	128.5	141.6
2003	5167.4	475.6	3371.7	310.3	147.8	144.5
2004	6399.0	593.4	3470.7	321.9	152.2	149.9
2005	8088.3	801.8	3677.3	364.5	161.2	169.8
2006	10154.8	1036.4	4007.6	409.0	175.7	190.5
2007	12540.2	1343.0	4348.9	465.7	190.6	216.9
2008	14863.6	1658.1	4368.3	487.3	191.5	227.0
2009	16895.0	1783.5	4868.0	513.9	213.4	239.3
2010	18958.4	1893.9	4783.3	477.8	209.7	222.6
2011	20780.0	2231.8	4523.6	485.8	198.3	226.3
2012	23221.1	2558.4	4702.4	518.1	206.1	241.3
2013	25928.2	2888.8	5000.5	557.1	219.2	259.5
2014	27754.9	3037.3	4993.3	546.4	218.9	254.5

*Table has been designed and compiled by the author on the basis of data: population//official website of the Federal State statistics service; URL: http://www.gks.ru/free_doc/new_site/population/urov/urov_11g.htm; the Russian statistical year-book compilation: 2010; -m.: Rosstat, 2010.-s. 591-592; the Russian statistical year-book.: 2013 statistics.-m.: Rosstat in 2013.-p. 523; the Russian statistical year-book.: statistical compendium 2014.-m.: Rosstat in 2014.-p. 512 (Table 1)

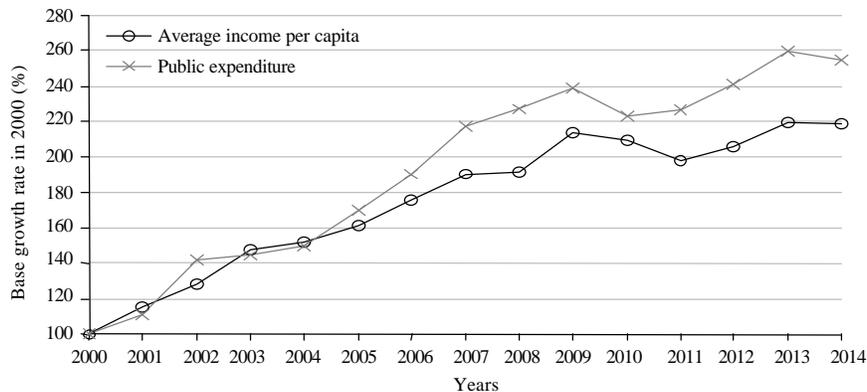


Fig. 4: Comparison of basic growth per capita income and Government expenditure to education in Russia in the period from 2000-2014 year (charts compiled by the researcher on the basis of data (Table 3))

Figure 4 presents the results of the calculation basis the average per capita income growth of the population and the amount of public expenditure on education in Russia in the period from 2000-2014 year produced above. Comparison of dynamics of these indicators allows us to reveal the fact that the actual amount of public spending on education over a period of time grew significantly more than the amount of incomes of the population. So, the size of the average per capita income of the population increased by 118.9% and public expenditures on education at 154.5%, almost 1.3 times more.

Thus, over the last decade, as in the situation with the dynamics of economic development, the amount of public expenditure on education rose at a faster pace of incomes of the population. With spending on education has exceeded the growth of average per capita incomes almost 1.3 times.

Sector of the modern market society is a society of knowledge is still determined by the planning parameters of the State financing and management of education. Even despite the fact that the predominant State financed part of the expenditure on education, in order to ensure social justice, the State, in fact, is the Manager of these funds. That is, essentially, non-market add-on-State determines the priority directions of the functioning and development of the industry which is pivotal to a modern market economy. In turn, this situation leads to an increase in the opportunity cost of society, when all the big spending on education are accompanied by all lower benefits that clearly demonstrates the analysis.

It is, therefore necessary to look for new forms of mainly market relations that define the development prospects of the national education system in the light of established global requirements. Organizational and technological ability to implement processes of formation

of new economic relations appeared at the present stage of reform when the Act was passed on July 27, 2010 No. 210-FZ "on the Organization of the provision of public and municipal services" which provides for the release of the universal electronic cards for citizens.

This map will represent a material medium containing issued him the digital information about the user and his rights to receive state and municipal services. Accordingly, users of universal electronic card can be citizens of the Russian Federation as well as Foreign citizens and stateless persons in cases where this is provided for by federal laws.

Universal electronic card becomes meaningful identity document of a citizen, the right of the insured in the compulsory insurance systems, other rights of citizens to receive public and municipal services including education. Thus, users of universal E-cards are becoming direct participants as economic relations and specific fiscal and regulatory relations. In this case, it is important to develop principles for using universal electronic maps to organize the disposal of funds budgets and extrabudgetary funds to the various administrative levels and send them to pay for educational services including the addition of citizen's own funds and financial resources of corporations.

This organizational-economic and financial basis opens the possibility of creating a new structure of economic relationships related to the provision of educational services. This new relationship will significantly increase the income of the education system primarily on market principles, taking into account the dynamics of supply and demand of relevant services that define promising trends of the educational system in the national productivity.

The study shows that the backbone sector of the modern market society is a society of knowledge is still determined by the planning parameters of the State financing and management of education. The preponderant part of the state financed spending on education in order to ensure social justice and the State, in fact, is the Manager of these funds. That is, essentially, non-market add-on-state determines the priority directions of the functioning and development of the industry, which is pivotal to a modern market economy. In turn, this situation leads to an increase in the opportunity cost of society, when all the big spending on education are accompanied by all lower benefits that clearly demonstrates the correlation analysis carried out.

CONCLUSION

For the establishment of a new system of economic and financial relations are encouraged to use the universal input electronic maps which will enable all citizens to become direct participants as economic relations and

specific fiscal and administrative relations, integrating means budgets and extra-budgetary funds, own funds and financial resources of corporations.

REFERENCES

- Bagrinovsky, K.A. and M.K. Isaeva, 2002. Basic model of the mechanism of management of technological. *Econ. Dev.*, 3: 31-39.
- Chapayev, N.K. and M.A. Choshanov, 2011. Creative pedagogics: Contradictions, problems, ways of their permission. *Sci. Educ.*, 10: 3-27.
- Godin, B., 2003. The knowledge-based economy: Conceptual framework or buzzword? Working paper No. 24, Project on the History and Sociology of S&T Statistics, pp: 1-29. http://www.csiic.ca/PDF/Godin_24.pdf.
- Kleyner, G., 2006. Microeconomics of knowledge and myths of the modern theory. *Higher Educ. Russia*, 9: 32-34.
- Kodzhaspirova, G.M., 2012. Pedagogical anthropology as a branch of knowledge. *Pedagogics Psychol.*, 4: 8-20.
- Makarushina, E.N., 2011. Fenomen of creativity and creativity in modern system of the higher education. *Basic Res.*, 12: 498-501.
- Morozov, A.V. and D.V. Chernilevsky, 2004. Creative pedagogics and psychology. *Academic Project, Russia*, pp: 100.
- Ostroumov, A.I. and O.F. Ostroumova, 2013. Creativity and creative training as the composed of education modernization in Russia. *Questions Theory Pract.*, 2: 149-153.
- Pavlenko, A.V., 2013. Categorical bases of the concept of economy of knowledge. *Econ. Bus.*, 5: 103-107.
- Ryabyh, E.B. and E.Y. Mezhujeva, 2014. Influence of innovations and creativity on formation of economy of knowledge. *Humanities*, 3: 33-38.
- Shubinsky, V.S., 1988. *Pedagogics of Creativity of Pupils*. Knowledge Associates, Moscow, Russia, Pages: 80.
- Tatuyev, A.A., 2012. Transformation of priorities of modernization of the higher school upon transition to society of knowledge. *Econ. Anal. Theor. Pract.*, 8: 27-34.
- Vagin, Y.R., 1996. *Creative and Primitive: Bases of an Ontogeneticheskoy Personologiya and Psychopathology*. Perm State Medical Academy, Perm, Perm Krai, Russia, Pages: 108.
- Yeliseyeva, I.I., 2010. *Statistics*. SPB Academic Publishing, St. Petersburg, pp: 141-146.
- Zaynullin, F.N., 2012. Formation of creativity at the senior school students. *Modern Researches of Social Problems, The Electronic Scientific Magazine No. 10*, pp: 30.