

Functional Principles of Education Modernization

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Abstract: Problems of the reform of the education system are addressed in the context of the shortcomings of the traditional approach to teaching in which students have not generated the methodology of creativity and consequently, do not develop the ability to professionally-creative activity. This together leads to a decrease in the quality and effectiveness of education, however, undermined the basis of forming the modern development of the knowledge society. The purpose of the study is to identify and systematize the basic theoretical principles, methodological parameters the new modernized education system.

Key words: Education, spending on education, education, education upgrading, continuing education

INTRODUCTION

For the modern stage of development of the society and the processes occurring in it is characterized by complexity and unpredictability. This is largely due to the formation of new economic relations in education and related fields. Data of economic relations in the era of knowledge society, enable a new type of socio-economic development of social reproduction which is not physical but spiritual factors-knowledge, information and creativity. In many ways this leads to changes in the social, economic and political spheres of society, making human development at the present stage is characterized by an acute need in the development of personality creative potential, ability to address and resolve the problems caused by global restructuring of society. All this together makes the need to reform the modern educational system.

MATERIALS AND METHODS

The principal methods of analysis were the identification of trends in changes the amount and proportion of public expenditure on education, comparative, analytical and constructive synthesis.

The main part: So, the domestic education system as a whole and its high school in particular, based on the

traditional style of learning. However in the current conditions within the educational paradigm becomes impossible the formation of creativity and creative personality. Traditional training contributes to a lack of student, reproductive thinking, intellectual passivity and consumer relations. This model involves training post teacher knowledge and means of action in finished form with a view to reproducing the assimilation that determines teacher as the sole initiative of the current subject of the educational process. 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.

According to several experts in the field of education, the education system, created in the 19th century to meet the requirements of the time-industrialization. However, the main feature of our time is an enterprise that requires completely different approaches. The current education system does not contribute to the development of unconventional thinking, resulting in the modern labour market there is an acute shortage of talented and creative personalities. In some cases, stresses that the education system produces thinking and as a consequence, style of management companies. While the current system does

not allow for the possibility of committing errors that weans people to be creative and make discoveries through trial and error. At the same time, entrepreneurship requires a different approach to the human mind, rather than concentrating on only the right response which may not exist in reality (Clark, 2013). Therefore, the future development of society is determined by the variety of talent and not only the concept of behavior.

The current differentiation of the population access to education, mediated by the presence of a wide range of services in the context of the education system in Russia, declared public and accessible to the entire population, raises a number of questions and requires analysis of public expenditures and their effectiveness as well as the quality of services provided in the public education system.

In the period from 2005-2014 years, public expenditure on education was gradually increased from 801.8-3037.3 billion rub. (1203.0 billion in 2005 prices). At the same time, the share of education in the structure of expenditures of the consolidated budget of the Russian Federation declined from 11.8-11.2% (Fig. 1). If you map the general dynamics increase the expenditure of the state budget (growth rate during the period under review amounted to 157.5%) with increasing state budget expenditure on education (153.0%) it can be assumed that this trend in socio-economic policy of the government of the Russian Federation has a lower priority than for example, questions of social policy unit (growth rate of state budget expenditures totaled 171.1%).

At the same time is notable for the reorientation of education cost structure on sources of public funding and that in some approval may be considered a consequence of the process of strengthening the centralization of the state budget. So, if in the 2005 federal budget year accounted for 43.0% of total expenditures in all directions and at a fraction of the consolidated budget of the Federation subjects 36.0% in 2014 year this ratio has changed, respectively to 44.6 and 28.1% while expenditure increased load on extrabudgetary funds (primarily at the federal level). At the same time, part of the expenditure on education, the proportion of the federal budget during the reporting period remained almost unchanged (21.0% in 2014 year against 21.3% in 2008) and the share of consolidated budgets of the constituent entities of the Federation, increased slightly (from 77.6% in 2008-81.5% in 2014) while the costs in virtually ceased to be financed from extrabudgetary funds.

Thus, it becomes clear that the cost of "peripheral" part of the state budget are mostly focused on the financial support of the primary and secondary levels of

education. In contrast, the federal budget expenditure commitments are concentrated at the highest level of education (including refresher training). So, at a fraction of the federal budget in total expenditures of the consolidated budget of the Russian Federation in training, retraining and upgrading of skills in 2008-2014 years accounted for 35.5%, respectively and 38.4%. And on areas of higher and post-graduate professional education and applied research in the field of rehabilitation at a fraction of the cost of federal budget accounted for 95.1-95.8 and 98.8-94.7%, respectively.

In doing so it should be noted that it is almost impossible to measure the quality of higher education directly. Common test in this case students and graduates are held regularly and using different methods which further hampers the comparability of the results. In addition, these procedures are extremely biased. More representative indicators are indicators of the resource endowment of the university (the level of funding, the number of teachers-including academic degrees-per student, foundations, libraries, the availability of computers, internet access, etc.). However, they only give an idea of the availability of quality training, rather than on their realization (Clark, 2013).

The low level of education says, first and foremost, excessive light of higher education, at least in the majority of commercial segment of higher education. Professors and students virtually agree that educational standards at present do not have clearly defined criteria and therefore, a high school diploma can be obtained without much effort. This finding also confirms rapid growth over the past decade, the proportion enrolled in part-time system where the curriculum has traditionally been simplified compared to the day. An increasing number of students, not only those in need, combines work and study, particularly in the senior class. While in the new Russian economy creates a variety of opportunities for earning and early work experience that is more preferable for students rather than attending classes which inevitably reflected on the quality of the learning process.

In many respects the poor quality of education and high levels of corruption. Bribes are widespread both in the preparatory phase in the universities and in the learning process. This state of affairs in higher education entails not only moral but also economically discredits the university diploma, forcing a potential employer to doubt the honesty diploma. Declining market score higher diploma-gap average wages of college graduates and workers without higher education gradually decreases. This is confirmed by surveys among the population. So, 51% of respondents in the study refused to agree with the

assertion that higher education's significance has been exaggerated and without it in our time can make a successful career and to arrange their lives.

It is also worth noting that the low quality of education in many ways stems from unacceptable low level of remuneration of the teaching staff. Decline in wages and the loss of a high social status in the early and mid 90's have caused a massive exodus of talented teachers. Today we can say that this exodus of several suspended but remains relatively low wages does not allow you to fully restore the personnel potential of high school.

Low wages also suggests that universities were not aimed at achieving a high quality of education. Otherwise, between universities (including between private and public) would be competition for the best footage that would raise their salaries to the level of market assessments, professional knowledge and skills of leading specialists. Often the situation when the official pay professor turns a fraction of even a starting salary of graduates and the required level for a decent life. This causes the teacher to seek additional earnings, distracting from the main work, resulting in obvious damage to its quality.

At the same time, the pace of innovation and change in education has increased significantly in recent years: the growing share of services in the scope of economic production; expanding the scope of application of the new information and communication technologies, reduces the time required to create new technology, derivatives, etc. in countries where as major objectives adopted improved national welfare and human development, higher education takes on a key role. In addition, education is confronted with problems of access to education the general population throughout the life cycle and the gradual change in the role of education in society its goals, objectives and content. The adult learning process is a process of transition to a new type of personality relationship to the world to the system of values and to himself (Antsyferova, 2006). In the course of learning comprehension of its increased capacity serves as a motivator for further self-development of personality and enhance the capacity of human capital. Accordingly, transformed the key motivational components need, purposeful behavior needs (Bogdanov, 2013). The person experiencing the need for both specific material things (clothes, food, etc.) and intangible (acceptance, opportunities for personal growth, respect, etc.) and strives to meet their, choosing a strategy (Semenova, 2011). Higher education is one of the ways such purposeful conduct. But the end results is beyond

the scope of training in high school and is largely dependent on the country's socio-economic system. In addition, higher relevance another factor. Namely, the nature of the entity internal educational reasons under the influence which the individual serves the subject of its training activities and decides on choosing educational trajectory further education. The formation of internal positions occurs during the process of life and personal development, taking into account its objective position in the system of public relations (Bozovic, 2008). The internal position is a result of synthesis of personality of its relationship to the surrounding social reality and their place in it.

Widely known in the foreign literature received ideas about key provisions of the internal position of motivation, decorated in the theory of self-actualization identity (Chirkov *at al.*, 2007; Deci and Ryan, 1985). In this context, professional self-determination varies depending on which stage of formation.

Analysis of motivational component held in Russian universities (Kolesnikova, 2011) showed different patterns of motivational structure change of personality of students both technical and humanities during the educational process in higher educational establishments. In particular, technical students to graduation reduced motivation and the working direction. At the same time, students of humanities decline is observed only in middle school and at the time of its completion and the working focus of motivation. In general, students in the learning process, regardless of specialty there is a gradual increase in the level of motive associated with mastering skills for employment while the motive of getting theoretical knowledge.

In this regard, modern education system modernization must rely not only on the motivation of students or their teachers but also the motivation of employers interested in upgrading the skills of the workers or their retraining while changing activities (Subbotina, 2013).

In some cases on the basis of the foregoing, stand out the most important features of the role of positive motivation in the functioning and reproduction of human capital:

- Based motivational mechanism in organizations must be market management philosophy and organization of the system of fair pay, within which the growth of human capital of the organization stems from improved productivity, along with rising incomes of owners of human capital as well as providing other intangible effects

- Growth of human capital and increase revenue determines the increase in the number of needs, increase their level as well as creates a motivational mechanisms for investment in human capital
- Motivational mechanisms serve a necessary component of the process of reproduction of human capital

Thus, the decision of the modern task of modernizing education, together with the development of creative factors, contributes to education, undertaken throughout life. In 1972 year in the report “learning to exist: the world of education today and tomorrow” by the international commission on education, UNESCO has been designated a new socio-educational concept. The report contained a proposal for the adoption of the concept of lifelong learning as leadership in all countries of the world (Bodrov, 2012). Subsequently, this proposal was adopted as a basis of national education systems in almost all developed countries of the world. For example, in the year 2000 at the European Summit held in Lisbon had adopted a strategy of creation to the year 2010 based on the countries of the European Union the most competitive and dynamic economic area in the world, based on knowledge. The central point of the course, known as the Lisbon strategy was continuing education (Sergeyeva, 2013). The adoption of this strategy has confirmed the relevance of the concepts outlined in the UNESCO regulations.

The concept of “continuing education” was first applied in the United States in the 50's of the 20th century to refer to specific forms of adult education. The original “continuing education” was used as a synonym for self-education and human needs in the constant upgrading of their knowledge and skills. Subsequently, however, under continuous education was understood by the constant desire and willingness of people to be included in the educational process.

It should be noted that increased attention to the problems of lifelong education led to the introduction into scientific circulation of such concepts as “learning society” and its subsequent transformation into the “knowledge society”. However, the expression “the learning society” (learning society) to a greater extent peculiar to describe a society in which knowledge is not limited to either space or time. It is with the development of the learning society communicates the emergence of non-traditional educational institutions: “universities without walls” “flexible learning” schools, etc., the best known of which is the Open University in the UK, carrying out a similar university education preparing students on the job training by correspondence (Bodrov, 2012).

The adoption of the concept of lifelong education to meet the challenge of modernization of modern system of education requires a more detailed examination of the qualities of the properties and effects of the process of continuing education. With the rapid development and increasing complexity of modern society, people have to fulfill a lifetime all new roles and tasks, hence the need to continue to study life. Therefore, continuing education, often interpreted as human training activities based on education, previously obretnenom and aimed at more effective use of its own resources or the environment.

Continuing education system includes all types of education: pre-school, secondary, primary and secondary, tertiary, academic, extra, etc. Moving from one stage to another in the face of continuing education is not as clear-cut as in the traditional education system, characteristic for Russia.

The International Labour Organization (ILO) combines concepts such as lifelong learning, competence and qualifications in a single system. According to this approach, continuous learning involves employee training activities aimed at the development of competencies and qualifications throughout life. It is this process, according to the views of the representatives of the ILO, provides training for a new type of worker who owns professional flexibility, mobility and readiness in case of necessity to fast retraining or changing profession (Sergeyeva, 2013).

In this regard in many developed countries, special attention is given to the development of a model for lifelong, human capital development of national manpower and therefore, this policy direction has acquired international status.

Responsibility for the organization and support of a continuous process of training and retraining, training and retraining of personnel share educational institutions, employers and the state.

In Germany, for example, continuing education serves public policy priority, resulting in the formation of the installations in the public mind, continuing education throughout life; the establishment of an appropriate legal framework; development of the network of state and non-state educational institutions and structures with additional educational services for adults. In Japan, there are special state acts which regulate the process of obtaining continuing education people have permanent jobs as well as to define government subsidies for employers to conduct staff training. While state aid can receive representatives of medium and small businesses. In the Netherlands, there are individual training account, replenished by the employer and the employee that can be spent only for the purpose of improvement of professional skill of employees. In several countries, the

principle of regular appraisal of teaching staff, providing for compulsory refresher training at regular intervals, thereby increasing the production class of the certificate and to increase the wages of workers in education. Educational activity in France has a high degree of legal regulation including in the field of continuing education, as well as close cooperation between state and private educational institutions. Thus, a state may wholly or partially take over the costs of the activities of private institutions if they fulfill the obligations of public service. In Spain for the implementation of continuing vocational training systems to meet the state and social partners. The basis of this system is the tripartite foundation for training and employment, established and replenished by the social partners (the state, trade unions and employers union) (Astakhova, 2011).

In most of the developed countries, there is a common understanding of the essence of continuing professional education, forming the distinctive factor which recognized integrity as opposed to mechanical elements in the traditional system of increments (Tatuev *at al.*, 2015). When you do this the elements of modern educational systems generally have flexibility and rationality, by combining into a single whole. Thus, in space and time at each stage of the educational process is provided by the relative completeness of the vocational education that meets the needs of economic reproduction in the era of knowledge.

Meanwhile, the development of continuing education in Russia lags far behind developed countries. So, according to a study conducted by continuing education at the beginning of the year 2007 based on the methodology of Eurostat, Russia, compared to European countries where the education system covers almost half of the adult population aged 25-64 years, demonstrates a rather low level (Ayzikova, 2012).

For the 1st time the provisions of continuing education in the reform of the education system had been claimed in 1988 year on all union congress of workers of public education. In the project "integrated programme for the implementation of the all-Union concept of life long learning it was stated that in the current conditions of dynamic development of society cannot at any particular stage of human life to ensure his knowledge sufficient for successful social and professional life, therefore, education should be continuous and prognostically oriented nature".

Decree of the government of the Russian Federation dated November 17, 2008 No. 1662-r was approved "the concept of long-term socio-economic development of the Russian Federation for the period until the year 2020" where one of the directions of transition to an innovative type of socially oriented economic development supports the modernization of the education system. For efficient

use of the human potential and create conditions for self-realization of citizens throughout life, declared introduction in the educational system of the national qualification framework, qualification certification system and modular programmes. In order to improve labour market adaptation of population, sustained economic growth and the well-being of society it is planned to extend participation in continuous education. In particular, up to 2020 year implement an annual support of the order of 100 organizations with the most effective, innovative programs of continuing professional education.

In addition, this document contains a section "continuing professional education" system where the main activities of the government of the Russian Federation in the field of continuing education: the formation of a competitive market in services continuing education and corresponding financial mechanisms. Moreover, it is anticipated that the provision of services within the system of continuing education will be scientific, educational and research organizations that have received the relevant state accreditation. These organizations regardless of form of ownership have an equal right to apply on a competitive basis in pursuance of the state job (order) for the provision of educational services. In addition, it is planned that public assistance also will be provided when you create independent centers of attribution (certification) of applied and professional qualifications as well as in the introduction of modern training technologies.

An analysis of the documents suggests that the concept of lifelong education in Russia provided spotty and fragmented theoretical builds as well as the declarations and principles with no real links between themselves. In general, actual problems of low efficiency of modern system of education in Russia require a more detailed elaboration of the concept of lifelong learning and its integration into the development process of the knowledge society.

Therefore, in the modern era to the state arises the task of ensuring the long-term legal, economic and institutional conditions for the development of flexible effectively functioning system of reproduction of human capital. The solution of this problem should take place in the plane of the use and benefits of continuing professional education, vocational training and retraining, taking into account the trends of economic development. In the end this will overcome the problem of mismatch of supply and demand for labour as well as improve the quality of the labour force and their professional mobility. And at the same time and to strengthen the role of education as a key factor in the development of society in the era of knowledge.

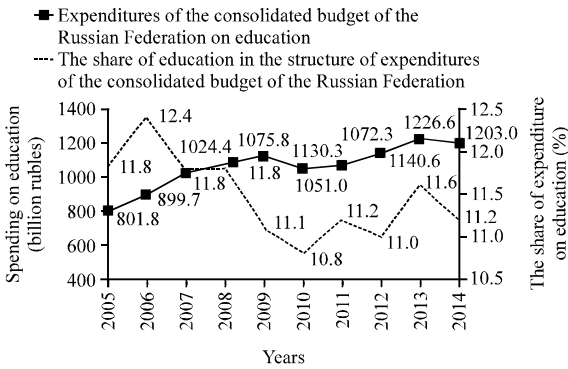


Fig. 1: Changing the volume and the share of expenditures of the consolidated budget of the Russian Federation on education during the period from 2005-2014, the year 2005 prices, bln. rub. and %, respectively (graphic designed and built by the author on the basis of data: Ministry of Finance of the Russian Federation//informational-analytical section of the official site. URL: http://info.minfin.ru/kons_rash.php; <http://www.Manila.gov.Ph/localgovt.htm#sistercities//officialwebsite>. URL: http://www.gks.ru/free_doc/new_site/vvp/tab4.xls)

Given the totality of the above mentioned regulations it seems appropriate to propose a scheme of functioning of an upgraded education system (Fig. 2) which must be formed in the framework of the National Centre of Mass Online courses (NCMOK) with a built-in mechanism for managing educational motivation.

So from the diagram in Fig. 1 shows that the proposed mechanism of educational management motivation as has been said is a structural component of the National Centre of Mass Online courses (NCMOK). The main task of the implementation of this mechanism is to increase the efficiency of the educational process through the integration of motivational specifics of personality. In particular, a key role in the educational process is given to polimotivacionnoj the system of educational activities which is individual for each person. This system largely depends on the nature of the identity and motives of the self-determination process of the individual in society. In addition, the proposed mechanism for a new quality of the social contract which is an important feature of modern public services (Tatuyev and Sokhrokov, 2012).

In this regard, the proposed mechanism should aim at a comprehensive study of the characteristics of self-determination of the individual with the aim of identifying its motivational structure as well as the establishment of internal and external motives of educational activities, directly impacting on the

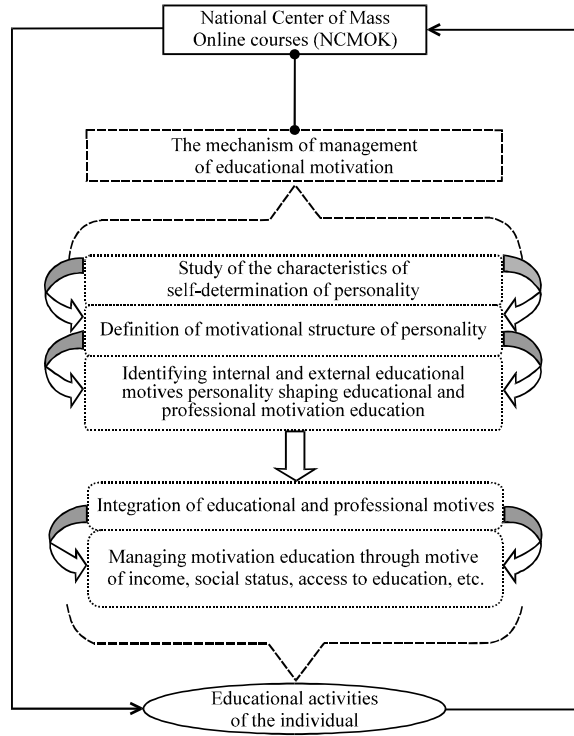


Fig. 2: The mechanism of management of educational motivation, acting within the framework of the National Centre of Mass Online courses (NCMOK) (scheme formulated by the resaecher)

development of cognitive and professional motives. It is important to note that in the system of economic relations resulting from a high level of socio-economic differentiation of populations, educational and professional motives may be in a sort of antiphase-contradiction cognitive interests and professional interests. In turn this makes the process of integrating cognitive and professional reasons.

Based on the previously described views on principles of forming motivation for educational activities, it seems that the process of integrating cognitive and professional motivations can be accessed through the motifs of income, social status, access to education which are determinative for the motivational structure of the modern student. Motives for data management, you can use the key aspects of the procedural motivation theories, according to which in the educational system, based on the concept of lifelong education, you should include the principle of setting goals, assuming that the student's behavior constituted deliberate purpose and intentions of his learning. In addition, you should use the provisions of the theory of positive motivation, particularly on the part of the employer.

On the whole, the implementation mechanism will synchronize internal presented motivational personality structure with the process of self-determination of its role in society. It will have a qualitative impact on changing working life of employees in accordance with their motivational type, abilities and needs; provide continuing education and professional development, accumulation of human capital; will contribute to the effective management of labour and production resources. All combine to have a positive impact on enhancing the effectiveness of the proposed scheme previously functioning of an upgraded education system.

RESULTS AND DISCUSSION

The results show that in the domestic economy a trend decline in the share of education expenditure in the structure of expenditures of the consolidated budget that in practical impossibility to measure the quality of higher education directly necessitates the formation of a new long-term legal, economic and institutional conditions for the development of flexible effectively functioning system of reproduction of human capital. The solution of this problem is proposed to be moved into the use and benefits of continuing professional education, vocational training and retraining, taking into account the trends of economic development.

CONCLUSION

It is proposed that the concept of the functioning of the modernised system of education which must be formed in the framework of the national centre of mass online courses. Thus, the main task of the implementation of this mechanism is to increase the efficiency of the educational process through the integration of motivational specifics of personality. In particular, a key role in the educational process is given to polimotivacionnoj the system of educational activities which is individual for each person. This system largely depends on the nature of the identity and motives of the self-determination process of the individual in society. In addition, the proposed mechanism for a new quality of the social contract which is an important feature of modern public services.

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