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**POTENTIAL OF EDUCATION AS A FACTOR
OF HUMAN CAPITAL DEVELOPMENT**

The paper provides the theoretical basis of education as a component of the quality of human capital of the nation, identifies the features and problems of education development at various levels as well as the problems of public programs of development and support of education.

Keywords: human capital, potential of education, scientific potential, intellectual potential, marginalization, social partnership.

Бауыржан Есенгельдин, Валерій Бірюков, Діана Ситенко
**ПОТЕНЦІАЛ ОСВІТИ ЯК ЧИННИК РОЗВИТКУ
ЛЮДСЬКОГО КАПІТАЛУ**

У статті дано теоретичне обґрунтування освіти як якісної складової людського капіталу нації, виявлено особливості та проблеми розвитку освіти на різних рівнях, проблеми державних програм розвитку та підтримки освіти.

Ключові слова: людський капітал, потенціал освіти, науковий потенціал, інтелектуальний потенціал, маргіналізація, соціальне партнерство.

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**ПОТЕНЦИАЛ ОБРАЗОВАНИЯ КАК ФАКТОР
РАЗВИТИЯ ЧЕЛОВЕЧЕСКОГО КАПИТАЛА**

В статье дано теоретическое обоснование образования как качественной составляющей человеческого капитала нации, выявлены особенности и проблемы развития образования на различных уровнях, проблемы государственных программ развития и поддержки образования.

Ключевые слова: человеческий капитал, потенциал образования, научный потенциал, интеллектуальный потенциал, маргинализация, социальное партнерство.

Defining the problem in its relation to the key scientific and practical problems. At the early stages of economic reforms, all changes in employment depend on the processes of privatization, creation of different forms of ownership and a mixed economy, new businesses, development of corporate, group and individual private ownership. In today's modern economy, the situation changes radically. Before proceeding to the analysis of socioeconomic factors in the formation and development of human capital of a country, we have to denote the principal authors' position: we recognize as the capital the man but not his abilities. In this sense, we are close to the interpretation of such economists as D.R. Kulloh (1830), K. Marx (1984), I. Fisher (1993), A. de Fovill (1887) and others, which include human beings with their acquired skills and craftsmanship in their definition of capital and recognized the importance of investment in people as a means of increasing their productivity. Knowledge, experi-

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ence, abilities inherent and inalienable from man are not regarded as capital. Thus, under human capital we mean an individual, and, speaking of the human capital of the nation – the population of the Republic of Kazakhstan, and regarding the formation and development of the country, we mean also "the human capital of the nation".

Education provides the foundation for productive qualities and abilities of individuals. Education is not only an essential element of human capital, but also an important indicator of human development. It is through the institutions of formal education as a powerful agent of socialization the stereotypes are reproduced, and the stratification of society is supported – the process which is the basis for social differentiation. Everyone knows that if men and women do not get good education, the situation entails great economic and social costs.

According to the Constitution of RK, secondary education is obligatory, the state guarantees free secondary education in public educational institutions by financing this up to the standards corresponding to the level of developed countries. Free educational services within the state educational standards is one of the fundamental principles of state policy in education.

The literature review on the problem. Interest to creative abilities of people has always been important among the classical school of political economy. The founder of British classical political economy W. Petty (1940) introduced a new category – "live active force." He wrote about the value of a person, offered "living forces" to be considered an integral part of national wealth. The main factor determining the difference in the magnitude of the value of individuals, W. Petty (1940) considered creative qualities. He stressed that the wealth of society depends on how many people are committed to bringing entertainment and recreation for the mind, and practiced activity moderately raises qualification of people. Thus, W. Petty (1940) considered that skillfulness of population is not given ready by nature, but it is the result of purposeful human activity.

Subsequently, the idea put forward by W. Petty was taken and developed by other members of the classical school of political economy, among which S. Jovellanos (1998) and A. Smith (1956) played the most important role in construction of the base for the future theory of the human capital.

In the works of G. Jovellanos (1998) who was representative of Spanish economic liberalism the basic forms of investments in human capital (formation, health protection, migration) have been considered, the problem of monetary estimation of investments in people is mentioned; direct dependence of the results of work on knowledge and experience with which this work is applied is revealed: "The principal source of public prosperity lies in education". G. Jovellanos (1998) considered education both as consumer and as the investment blessing, – an idea later became central to the human capital theory. In addition, he made practical proposals on the reform of education and physical education, as well as developed new projects and land tax reform with the view of the best financing of human capital in Spain.

A. Smith explored in detail the production of human abilities to work. He argued that the productive forces of human living are paramount in any economy. "The acquisition of skills – according to A. Smith – learning always requires actual costs, when are capital assets, as it were realized in his personality. Great agility and ability

to work requires a certain cost, but these costs are reimbursed at a profit" (Smith, 1956).

A. Smith analyzes the formation and development of human capabilities as the creation of "core capital" and here he comes close to understanding of this process as a specific production. He reasonably believes that a person's ability to work is the greatest wealth of society and include them in the "capital" and argues that the labor expended on the production of this capital is not productive. A. Smith (1956) has proved the primary role of "live productive forces of the person" in the economy. Increased productivity or labor efficiency depends primarily on improving dexterity and skills of employees, and then by improving the machinery and tools, with which he works.

A. Smith (1956) was one of the first to develop the idea of investing in human capital. His thoughts on the cost of training, education resonate with the modern concept of human capital and theory of investment in human capital. He wrote that the acquisition of the ability to work, considering the content of their owner for his education, training or apprenticeship, always requires the actual costs that are fixed assets, as would be realized in his personality. These capabilities are part of the wealth of the society to which that person belongs. The scientist proved that the differences between the capabilities of people with different levels of education and training reflect the differences in income necessary to pay for the acquisition of these skills. Therefore, income from investments in professional knowledge can be compared with the income from investments in material resources. The category of fixed assets includes acquired by teaching and training the work skills and the useful abilities of members of society, along with cars and buildings.

D. Ricardo (1995) identified the production of human abilities with the consumption of vital resources and benefits, with the reproduction of population. In this context, he singled out the role of education. The lag in the development of countries he explained by "lack of education at all levels of people".

In the XIX century the idea of human capital attracted the attention of outstanding researchers. Regarding the content of the concept of "human capital" two directions were outlined in the economic theory:

- definition of human capital as a set of abilities, knowledge, skills, qualifications that are productive factors of labor;
- treatment of a person as capital.

According to K. Marx (1984) in the general structure of capital the cost of labor force is in the form of variable capital or as part of working capital. However, he stressed that "in order to transform human nature so that it has received the training and skills in a certain division of labor, specific work force requires some education, which in turn costs greater or less amount of commodity equivalents. These costs of education vary depending on the qualifications of workforce". Marx's economic approach makes it possible to justify the methodological category of "labor power", to identify the conditions for the transformation of labor into a commodity and create requirements for a quality work force, which in the course of manufacture becomes the capital.

Definition of the target problem for the analysis. The main feature of the analysis of human capital, distinguishing it from the traditional understanding of human cap-

ital, is a modified hierarchy of concepts. Actually, human capital is considered one of the parts of a more general category of "intellectual capital", while in our treatment the intellectual capital embodied in a particular level of education and knowledge is one element of human capital. General human capital is accumulated mainly in youth, during staying in the walls of educational institutions (schools, colleges, universities etc.), and specific human capital – in the period of labor activity as a result of training in specialized training centers, training courses in firms and at a workplace. But this law is absolute, as modern production requires continuous education and clear distinction between general and specific training is not always possible. For example, a person can get very specific knowledge and skills in a technical high school or university labs; practical work can enrich human knowledge and is of very wide spectrum and wide field of applications (e.g., art of dialogue and people management).

The measures aimed at improving the education system, have a different time horizon (short-term and long-term). The most important task today is to preserve the capacity of education to the point where it will be possible to significantly improve. Meanwhile, it is necessary to define priorities among numerous directions of educational reforms. Not all the changes require significant funding. For example, a survey of 500 schools in the United States showed no correlation between the costs spent on 1 pupil, teachers' salaries, number of students in a classroom, on the one hand, and student achievements – on the other.

Presentation of the research material, including the description of the methodology and main results of research. Currently, state education system dismantles its ineffectiveness in encouraging reforms. The number of programs is accepted which have particular importance in the implementation of new educational technologies according to the international standards. October 11, 2004 the Government Program of the Development of Education in the Republic of Kazakhstan for 2005–2010 was adopted and implemented. Therefore, today more opportunities for education appear being a component of the motivational mechanism to work.

It should be noted that until the 90s the coverage by preschool education in Kazakhstan was stable. Due to the decline in employment and increase in child support payments coverage dropped sharply. The trend is not unique to our country. At the subregional Education Forum of the Asia-Pacific region in Bangkok in 2000, coverage of child-care has been recognized as the most critical for all the countries of Central Asia.

The result of mass reduction in the number of preschool institutions is an acute problem of preparing children for school. According to the Statistics Agency of RK, only 54% of preschool children from 3 to 5 years in 2010 had access to early childhood education programs. Pre-school education still remains a problematic area in the country's education system requiring urgent solutions.

Secondary education covers 99.8% of all children. Percentage of children completing primary school and reaching grade 5 in 1999 was 92%, and in recent years as a result of the efforts, the figure rose, and now it is equal to the similar indicator in industrially developed countries, i.e. 99%. However, the problems increase as we move up in the levels of education. Enrolment in upper secondary education in the country is 79%. Net enrollment of young people aged 16–17 is 93% and 7% of the

population never continue their training. If in 2003 the number of students was more than 3 mln people, in 2010 it was already 2.5 mln people. And although the situation is currently improving, the problem of full coverage by secondary education has not been yet solved.

Absence of adequate mechanisms to monitor attendance and impartial analysis of the data do not allow objective conclusions on the access to education. There is no reliable information on school attendance, school administration hides the facts of absenteeism, there is no mechanism to work with children not attending school, not calculated is the migration, there are problems with materially disadvantaged families, reducing the responsibility of parents in upbringing of children. All that does not allow timely measures to maintain general coverage with training of children of school age, especially those from disadvantaged backgrounds. This leads to further marginalization of the society. The claim that Kazakhstan provides general coverage of school education should be attributed mainly to prosperous families. Thus, the pedagogical problem turns into a social one. Education system alone can not solve it.

The worst things are in the system of vocational education. In the recent years, the number of graduates of vocational schools had increased only by 200000 people. At this level of education children from low-income groups are traditionally represented.

After dramatic reduction some stabilization was achieved recently. The demographic indicators show that in 2000–2010 there was a maximum increase in young people aged 14–17. If we add to this the age of 18, the figures will be more than 1 mln. This youth fills the labor market; therefore the youth labor market is quite intense and tends to deteriorate (the rate of unemployment among young people today is more than 15%). The uneven distribution of professional educational organizations in towns and the lack of them in rural areas (in 2010 professional schools had about 98000 people, representing 10.3% of the population aged 16–18), as well as limited number of training programs lead to the conclusion about the lack of access to "prestigious" areas of learning for children from poor families, especially for children with special needs and graduates of orphanages. Unfortunately, the level of funding for vocational education (0.1% of GDP) suggests that this sector, despite repeated political statements remain as a "step-daughter" of government policy.

The problem in vocational training is connected with changing economic situation which develops unregulated market of educational services. There is no social cooperation between employers and vocational training system, which leads to imbalance in educational levels and sectors of the economy. Young people with no vocational education remained unprotected. According to preliminary forecasts, 25% or 144200 of young people are entering working age with no training at all. The profile structure of education must include target training programs for high-tech industries ensuring national systems infrastructure, quality control and training.

The important link in the education system and in ensuring the economy with highly qualified institutions is higher school. Higher schools are the last formal step in preparation of qualified specialists. In higher education there is the issue of security of highly qualified specialists with scientific degrees. The question of personnel maintenance plays not the last role in education.

All innovations that are introduced into the system must be carefully analyzed, because they may adversely affect the quality of education. The lack of serious training is related to the loss of the ability to learn. Reforming this area, it is impossible to move away from the positive accumulated experience. However it is also impossible to deny the need to improve this system, because all disadvantages of higher education are obvious and need to be addressed. Modern higher schools in Kazakhstan do not consider the realities of the economy. To some extent, these gaps are due to Western system of education: increased number of students study abroad on a special state program (3000 students per year will get funds from the national budget for education at leading universities of the world). Increasing the number of students is a source of intellectual enrichment of the country. In developed countries, students are not only filtered by professional fitness, but also participate in the formation of the intellectual elite of society. Therefore, the elite of Great Britain is represented by Oxford and Cambridge, and the US elite – by the universities of "Ivy League".

Important directions of process in the improvement of higher education are seen to provide private educational institutions with high-quality personnel. It is necessary to attract a new generation of scientists for the development of scientific and innovative potential, commercialization of science and communication between science, production and business. Structural changes are based on the need for establishment and strengthening of research centers through internal efforts and, of course, not without the support of the government and private business. Qualitative changes in the system of higher education that will positively affect the development of this sector, are achieved through the creation of conditions for effective competition between universities to receive funding based on their actual contribution to science and education.

Meanwhile, with the development of the society the need for continuous learning increases. Knowledge gained in school and university is not enough for the entire period of active employment.

Learning throughout the life has been widely recognized by the world, and now has become the priority. Leading European countries recognize the importance of this concept for future socioeconomic development, social cohesion and information society. The meeting of the European Council held in March 2000 in Lisbon (Portugal) stated that the educational system today faces the need to identify strategies and practical measures aimed at promoting learning throughout life. This means a new approach to learning with a focus on development and human ability to learn, not only at school age, but also during the entire life in different situations, both formal and informal. If learning throughout lives is taken as a learning process from the moment of birth until the end of life, an important requirement is to ensure quality basic education for all citizens from childhood onwards. This statement is the most common concept of education for all.

Education is one of the necessary conditions for successful human adaptation to the information and the market environment and access to resources, which guarantees free choice of life. From the perspective of learning throughout life, of particular importance is the skill to learn, and a stable positive attitude to learning. Both concepts – each by its own principles and tools – are focused on achieving the main goal

– expanding opportunities for development and realization of human capabilities in all the areas of life: economic, political and cultural.

Professional development is developing the intellectual potential of employees, adjusting the curriculum required under the existing conditions of business. Many schools focus only on certain companies, while others provide a variety of courses for all interested persons on the basis of different business schools and by firms' orders. Universities provide necessary training to companies, carry out consulting activities and producing training materials for corporations.

Corporate universities are very important for success in business and it is expected that they will thrive as long as the labor force will be considered the major asset, as with the training increases the value of labor, and the more additional knowledge, you get the greater is the return. With the development of market relations and business, and their globalization, the need for corporate training, retraining and raising the level of education is becoming increasingly apparent. Because fast rates of development of Kazakhstan economy and technologies lead to necessity of adequate maintenance of these processes, highly qualified labor force capable flexibly to respond to changes at the labor market is needed. To keep pace with these changes, employees must possess relevant professional and personal qualities, constantly improve and update them. The strategy of industrial innovative development of the education sector identified one of the main "hot spots" of sustainable development. It must be noted that education in Kazakhstan should become a dynamic system and respond to accelerating processes of globalization and informatization.

Conclusions and prospects for further research. Thus, the most important direction in reforming the existing system of employment and labor market regulation should be the policy to create new jobs for a new quality of labor. Providing effective employment for the vast majority of workforce in modern industries, the jobs that are competitive in terms of performance, environment and work culture should be the priority for long-term economic growth. The realization of this goal requires an increase in professional, sectoral and territorial mobility of labor, possible to achieve the balance of jobs and the structure of the relevant characteristics of the workforce. Unfortunately, the creation of new jobs is still dominated by economic interests and business needs, with weak quantitative and qualitative assessment of the labor supply.

In this connection it is worth mentioning that some measures taken by the government in the period 2001–2003, when the Ministry of Economy and Budget Planning made plans on new and resuscitations of the standing idle medium and large enterprises provided a significant increase in jobs. However, from mid-2003 this work has been almost over.

Meanwhile, government regulation of creating new jobs is the major tool of economic restructuring, which is the basis for reforming the employment system, its optimization, and in the future – achievements of full and effective employment of all wishing to work. Regulation of jobs, both at national and regional levels should take into account all the factors of socioeconomic nature that lead to the functioning of market mechanism.

The complex account of these factors should be the basis for the development of the government program of job creation as an essential component of the overall strategy. Only the inclusion of indicators of movement of jobs in the general system of

common basic macro- and microeconomic indicators of economic development will help to overcome the passive attitude of government authorities to the situation at the labor market, to compare them with the desired perspective of the employment structure and its dynamics, regulating the development of the jobs market in the right direction. This, in turn, will increase the efficiency of financial support by state and regional authorities and the management, conservation or increase in jobs in which development is determined by the priorities of economic restructuring.

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