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EFFECTIVE MANAGEMENT OF HUMAN CAPITAL AS THE BASIS FOR THE DEVELOPMENT OF NATIONAL ECONOMY

Abstract. One of the priorities of the institutional and structural reforms implemented by Kazakhstan in the years of its independence is the formation of systemic conditions for the development and growth of the country's human capital. The issue of the development of human capital has always been in the focus of both conceptual documents that determine the development strategy of the state and society, and real actions undertaken by the political leadership of the country. Entering the forefront of human capital is one of the modern global trends. Human capital is the main economic resource of the 21st century, increasing the country's GDP, which has become the main productive and social factor in the development of the economy of the Republic of Kazakhstan.

The transition of the Republic of Kazakhstan to a market economy raised the question of the need to create effective systems that ensure high quality human resources, the peculiarity of which is that:

- firstly, the more people are involved in professional activities, the more they accumulate life and professional experience, the less time they need for a high-quality solution of professional tasks, the greater their value;
- secondly, this is the most complex object of social management;
- thirdly, the professionalization of activities requires a large capital intensity for the formation of professionals;
- fourthly, the high efficiency of the activities of professionals in the organization is achieved by creating a rational management of their capabilities.

Keywords: human potential, human resources, human capital, competitiveness.

Introduction - An important area of effective human capital management as the basis for the development of the national economy of the Republic of Kazakhstan is the task of the qualitative growth of human capital, which acts as a driving force for modernization processes. To this end, educational programs are being developed and updated, the task of which is to train specialists based on advanced knowledge and practices. In addition, attention is paid to the development of the scientific field as a transfer of new technologies to all relevant areas and sectors.

The new quality of the country's development, associated not with the raw materials economy and the era of "oil abundance", but based on breakthrough technologies, a competitive market economy, good governance, and a good banking system, is determined by the quality of human resources living and working in Kazakhstan.

In a global context, the competitiveness of a country's human resources is becoming a more significant factor than its availability of raw materials. The competitiveness of human resources determines the competitiveness of the state at the present stage.

The modern economy is called the economy of effective human capital, which emphasizes its main role as a productive factor in the development of the state and society.

Outlined priorities for the further development of Kazakhstan, such as a new quality of industrialization based on the achievements of the fourth industrial revolution, digitalization of various sectors of the country's economy, development of resource potential based on integrated information technology platforms, the widespread introduction of "smart technologies" (in the agricultural sector, transport and logistics sphere, construction and utilities sectors, the sphere of city management, etc.) are directly related and determined, first of all, to honors human resources, they can be realized only through the efficient operation of the country's citizens in all sectors of the economy.

Human capital is becoming the most important factor in the country's economic growth, the basis of its sustainable development, the creation of a “smart economy”. A deep imbalance of people’s opportunities and choices arises from income inequality, as well as education, health, voice, access to technology and exposure to shocks. The gap in levels of human development is a reflection of the inequality of access to education, health care, employment, credit and natural resources, due to gender and group affiliation, disparities in income and place of residence.

Literature review – Since its inception, economic science has paid attention to the study of human abilities, their place and role in social production. For many years, within the framework of economic science, scientists have made attempts to develop a working model of a person that allows the most accurate description of human behavior in terms of economic laws.

For the first time, the model of “economic man” was developed by representatives of classical political economy. W. Petty, the ancestor of British political economy, when calculating national wealth, proposed, along with property, to include the person himself with his creative abilities and suggested evaluating them the same way. He considered people to be the main wealth of the country and tried to measure their value [1].

In the XVIII century. A. Smith developed the ideas of W. Petty. However, unlike W. Petty, A. Smith did not focus on the person himself, but on his abilities and skills. He emphasized the importance of education in increasing the country's wealth. Fixed capital, according to Smith, consists of machines and other tools, from buildings, from land, as well as from acquired and useful abilities of all members of society [2].

K. Marx considered human production as consumer production, where labor is not only reproduced, but there are also tendencies for its improvement. The main source of wealth accumulation, he considered the productive abilities of people. The productive forces of labor, the creative abilities of man, primarily intellectual, are reproduced only in the process of consumer production: “What really“ accumulates ”, but not as a dead mass, but as something living, this is the art of the worker, the degree of development of labor [3].

Accumulation is a constant preservation and at the same time a transformation of the already perceived, realized. " In the framework of his theory, a person’s ability to work is a commodity, and belongs to the personality of each individual employee. In the production process, abilities take the form of working capital, already belong to the capitalist as part of the total product and are used by him to obtain surplus value [4].

There are many approaches to determining the components of human capital.

The most generalized approach is the approach of Yu. G. Bychenko, according to which structurally human capital is as follows [5]:

- biological human capital - the value level of physical abilities to perform labor operations, the level of public health;

- cultural human capital - a set of intellectual abilities, education, skills, moral qualities, qualifications of individuals who are used or can be used in work and legitimize the possession of status and power.

B. M. Genkin believes that human capital is a combination of such qualities as natural abilities, health, education, professionalism, mobility, which are a source of income for a person, his family and society [6].

I.A. Nikitin and V.I. Romanchin believe that human capital is a specific reserve of knowledge, skills, abilities, motivation and human health, which are formed as a result of investments and rationally and effectively applied in the process of labor with the aim of increasing the income of an individual, organization.

S. A. Dyatlov by human capital means a certain stock of health, knowledge, abilities, skills and motivations of a person accumulated as a result of investments that are expediently used by him in a certain sphere of social reproduction and contribute to the growth of his income, increase in labor productivity and production efficiency [7].

A. V. Koritsky emphasizes that the most important types of investments in a person are the costs of education and training in the workplace, increasing the level of knowledge of the employee and increasing the amount of human capital in the enterprise. Important are the costs of protecting health and medical

services, reducing the incidence and mortality of employees, as well as the costs of labor migration, childbirth, which are a form of reproduction of human capital [8].

R. I. Kapelyushnikov and A. I. Dobrynin consider human capital as a stock of knowledge, abilities, skills and motivations embodied in a person [9].

M. M. Kritsky allocates human capital as a certain form of life, while he proposed a methodology for assessing human capital at the stages of its development [10].

Methodology – Creating the necessary conditions to ensure a decent standard and quality of life for citizens is the main task of any state. The standard of living of the population, as a comprehensive indicator, reflects such aspects as the welfare of the population, the accumulation of human capital and the level of human development. Many countries of the world, pursuing various policies, implementing reforms and implementing various kinds of transformations, strive to increase the level of well-being of citizens, thereby ensuring social, economic and political stability in society.

The decisive influence on the formation of a modern understanding of the development process was provided by the theoretical developments of Nobel Prize winner Amarty Sen, in particular, his work “Development as an Empowerment”, published in 1989 [11].

A. Sen considers the development process not as an increase in material or economic well-being, but as a process of expanding a person’s ability to live a long and healthy life, have access to knowledge, do more things, and so on. At the same time, the process of expanding opportunities is primarily associated with the expansion of the freedom of choice of a person.

Mikhail Prokhorov considers the problem of human capital management in two aspects:

- in terms of the effectiveness of an innovative economy;
- from the point of view of the humanization of the process [12].

The human capital index is a weighted average of four indicators:

- the average duration of education is the average number of years of education received by the adult population of the country (aged 25 years and older), with the exception of years during which a citizen retook the same education course.

- adult literacy - the proportion of citizens over the age of 15 who can consciously read and write short simple sentences on the topic of everyday life;

- The expected duration of schooling is the total number of years of schooling that a child of a certain age in the future can count on, assuming that the probability of his or her stay at school at a certain age is equal to the current rate of enrollment for students of this age;

- the total share of students - the ratio of the total number of students at all levels of education (primary, secondary, higher), regardless of their age, to the total population that has reached the age corresponding to these levels of education.

The total indicator of human capital for country “x” is a weighted arithmetic average with the following distribution of shares: one third falls on the component “adult literacy”, while two-ninths on the other three components (total share of students, expected and average duration of study) [13]:

The total indicator of human capital =
 $1/3 \times Z\text{-value of adult literacy} +$
 $2/9 \times Z\text{-value of the total share of students} +$
 $2/9 \times Z\text{-value of the expected duration of training} +$
 $2/9 \times Z\text{-value of the average duration of training}.$

In a narrower sense, human capital is understood as the totality of knowledge, skills used to meet the diverse needs of a person and society as a whole. For the first time, the term was used by Theodor Schulz, and his follower Gary Becker developed this idea, substantiating the effectiveness of investments in human capital and formulating an economic approach to human behavior [14].

In his publications Noskova K.A. describes the modernization of the country's economy, which must begin with the modernization of human capital. The priority and mechanism for the successful development of industry or trade, the introduction of innovative technologies are people, human capital. Human capital is an integral part of the "intellectual capital" of the organization, which represents the difference between the market value and the book value of the company. The competitiveness of human capital is a priority for the state and is aimed at the quality of education and the formation of a system of institutions that create competitive conditions [15].

Economic estimates of human capital have become widely used both at the microeconomic and macroeconomic levels to determine the value of national wealth, social losses from wars, illnesses and natural disasters, in the field of life insurance, the profitability of investments in education, healthcare, migration and for many other purposes [16].

In economic theory, three main approaches to solving the problem of measuring human capital have been identified:

1) Indicator based on the natural characteristics of human capital, which includes the following indicators:

- literacy rate of the population;
- the average number of years of study per person;
- the proportion of workers with different levels of education;

2) Scores for the quality of knowledge of students according to the results of international test trials.

3) Cost based on accounting for the growth of an individual's income with the growth of human capital.

Ultimately, human capital is determined by the physical health of a person and the share of world, national, corporate cultural capital acquired by a person in the process of socialization, training, work, and advanced training [17].

In world practice, various indicators are used to assess the development of human capital, the most significant of which is the human development index (HDI) or human development index (HDI). When determining the success of a country in the development of human capital, more than 50 indicators are taken into account [18].

Thus, the analysis of various approaches to the definition of human capital showed that in the scientific literature it is customary to consider it in a narrow and broad sense.

In 2018, Kazakhstan took 58th place among 189 countries in the ranking of the Human Development Index. Our country is among the states with a very high level of this indicator. The top 5 rankings include Norway, Switzerland, Australia, Ireland and Germany. The lowest rates are in the Republic of Niger, the Central African Republic, South Sudan, Chad and Burundi (Table 1) [19].

Table 1 – Comparative analysis of indicators of the human development index by country for 2018

Country	Indicators				
	Human development index	Population size	Average life expectancy	Estimated number of years spent on education	GDP per capita
Norway	0,953	6000000	82,3	17,9	68012\$
Switzerland	0,944	8600000	83,5	16,5	57625\$
Australia	0,939	25000000	83,1	22,9	43560\$
Ireland	0,938	4700000	81,6	19,6	53754\$
Germany	0,936	81300000	81,2	17	46136\$
Russia	0,816	146800000	71,2	15,5	24233\$
Kazakhstan	0,800	18500000	70	15,1	22626\$
Uzbekistan	0,710	31300000	71,4	12	6470\$
Turkmenistan	0,706	5500000	68	10,8	15594\$
Kyrgyzstan	0,674	6200000	71,1	13,4	3255\$
Tajikistan	0,650	9100000	71,2	11,2	3317\$

Note – compiled by authors according to <https://ru.sputniknews.kz/infographics/20181007/7497756/kazakhstan-razvitie>

So, Kazakhstan, according to the study, rose in this ranking by two lines in comparison with last year - to 58th place. Analysts rated the Human Development Index at 0.8 out of 1. Thus, the republic was included in the number of countries with the highest level of human development. It was noted that life expectancy in 2017 was at birth 70 years. The expected years of study in the country are 15.1 years, while on average, studies in the country last 11.8 years.

Many countries of the former USSR fell into the group of states with a high level of human development. In particular, Georgia took 70th place, Azerbaijan - 80th, Armenia - 83rd, Ukraine - 88th. At the same time, Moldova and Tajikistan fell into the category of countries with an average level of development (112th and 127th places).

The level of education of the population of Kazakhstan, regulated by the Law of the Republic of Kazakhstan “On Education” dated July 27, 2007, is relatively high and approaches the average level of the OECD member countries [20]. Among the adult population aged 25 years and above, about 40% have secondary education as the highest level of education received, 30% have a college diploma, and 25% have higher education (Figure 1) [21].

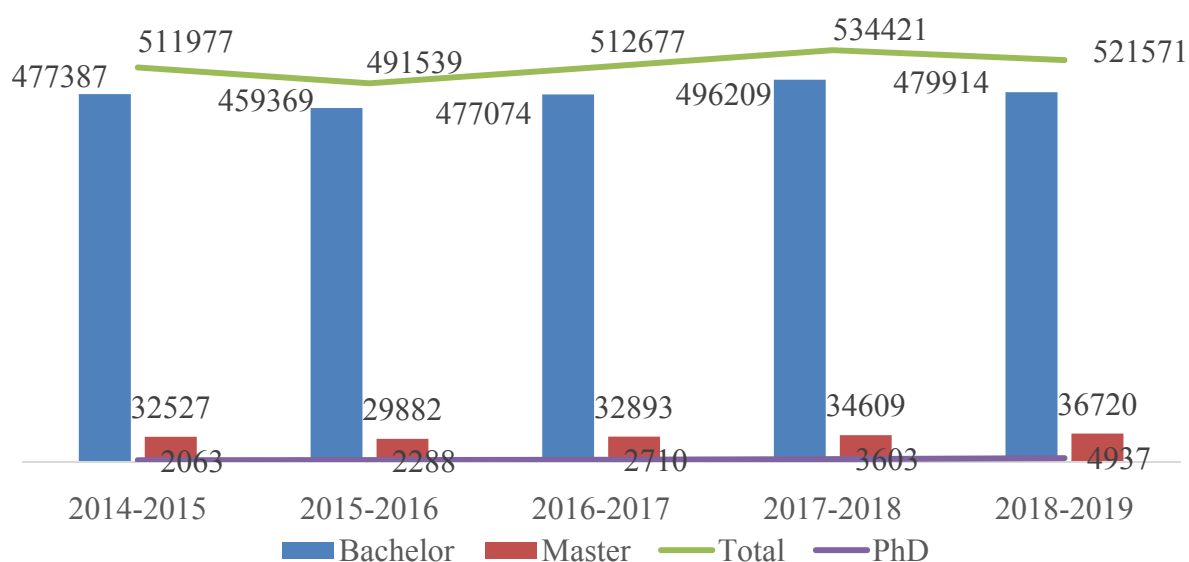


Figure 1 - Dynamics of the contingent of universities in Kazakhstan for the period from 2014-2019, in people
 Note – Compiled by the author based on the source: National Report on the Status and Development of the Education System of the Republic of Kazakhstan

In regional comparison, the largest number of students falls on the city of Almaty, the South Kazakhstan region and Astana, the lowest indicators in the Mangystau and North Kazakhstan regions.

High numbers of students are explained by the predominance of a larger number of young people and the number of universities in these regions. A slight decrease in the number of students compared to the 2016-2017 academic year was recorded in Almaty (-90 people) and Kyzylorda regions (-97 people) (Table 2) [21].

Table 2 - Dynamics of the contingent of students in the regional context of the Republic of Kazakhstan for 2015-2018 (people)

№№	Region	Number of universities	Academic year		
			2015-2016	2016-2017	2017-2018
1.	Total	130	459369	477074	496209
2.	Akmola	4	9267	8455	9441
3.	Aktobe	6	20336	21004	21829
4.	Almaty	3	9051	922	9342
5.	Atyrau	3	10014	11012	12046
6.	East Kazakhstan	7	26842	27969	29334
7.	Zhambyl	3	18950	19662	20874
8.	West Kazakhstan	4	26963	29919	31392
9.	Karaganda	9	36976	41738	42629
10.	Kostanay	7	19014	20057	20534
11.	Kyzylorda	3	10055	10070	9973
12.	Mangystau	2	3976	5081	5167
13.	Pavlodar	4	12703	13566	14537
14.	North Kazakhstan	2	4560	5235	6027
15.	South Kazakhstan	12	70827	71323	79423
16.	Astana city	17	51235	51800	52369
17.	Almaty city	44	128707	130761	131292

Note - Compiled by the author on the basis of the source: National report on the status and development of the education system of the Republic of Kazakhstan

In the context of the age structure of the contingent of universities, a high quantitative indicator of students in the age group of 18-21 years. A significant increase in the number of students in the age group of 25-29 years (+5 531 people) is noted.

According to the Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan, the growth rate of students in the age category of 60 years and older is recorded (Table 3) [22].

Table 3 - Age structure of students studying in Kazakhstan for the period from 2015-2018 (people)

Age	Academic year		
	2015-2016	2016-2017	2017-2018
Under 17 years old	1646	2332	2097
17	32962	35491	37233
18-21	293331	296111	299934
22	39734	39705	41432
23	25407	28645	29082
24	18734	20611	21022
25-29	23135	25515	31046
30-34	12127	14708	16482
35-39	7166	8026	10229
40-49	4216	4953	6466
50-59	895	935	1151
60	16	24	35
Total	459369	477074	496209

Note - Compiled by the author based on the source <https://economy.gov.kz>

In the structure of the gender composition of students studying in the country's universities, 292,364 women and 242,057 men prevail.

Thus, the development of a competitive national economy is impossible without high-quality human resources, where education plays a significant role, the role and importance of which has been recently considered as the main factor in socio-economic progress. As noted by specialists from the Organization for Economic Co-operation and Development (OECD), "the rate of basic long-term economic growth in OECD countries depends on maintaining and expanding the knowledge base.

The comparative advantages of countries are less and less determined by the wealth of natural resources or cheap labor and more and more by technical innovations and the competitive application of knowledge. Economic growth today is as much a process of accumulating knowledge as a process of accumulating capital [23].

Today, the requirements for social and humanitarian education are increasing due to the complexity of social and communicative processes, the intensification of international competition, the active development of advanced technologies, the diversity and complexity of problems that are significant for society in the long term [24].

According to the Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan in 2017, the republican budget expenditures on the education system in Kazakhstan amounted to 458,636 million tenge. In a number of budget programs, compared with 2016, there was a significant reduction in costs (Figure 2) [22].

However, the amount of funding under the budget program 100 "Training of specialists with higher, postgraduate education and the provision of social support to students" increased by 4.5%. In the higher education system of Kazakhstan, the distribution of state resources is mainly focused on 3 programs.

In 2018, there was an increase in the volume of the state order for personnel training (Figure 3) [22].

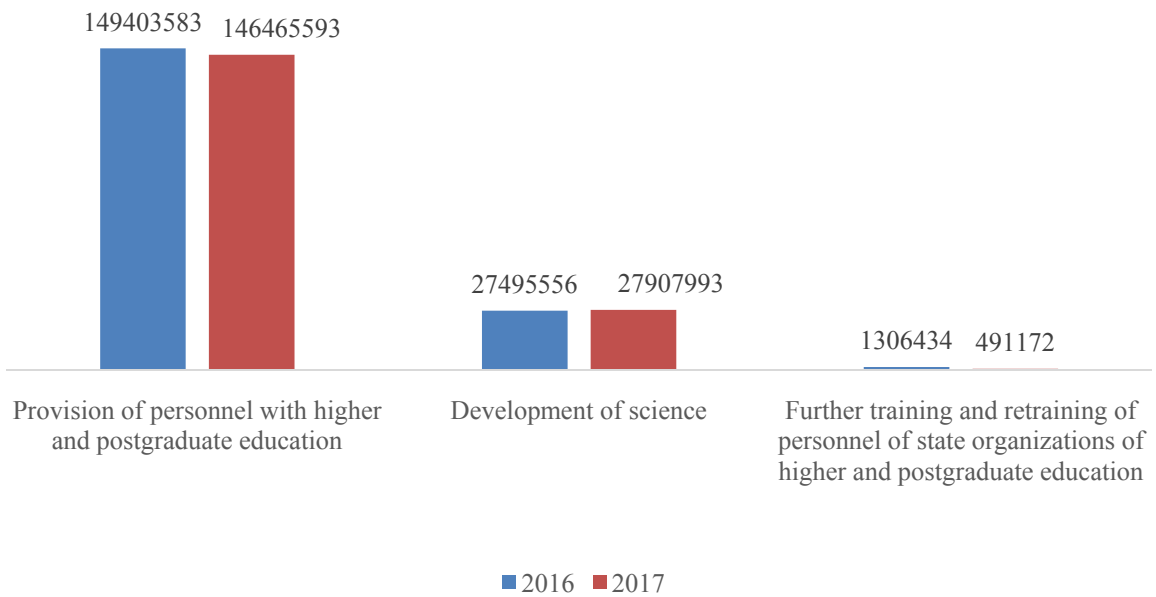


Figure 2 - Implementation of budget programs of the Ministry of Education and Science of the Republic of Kazakhstan in the field of higher and postgraduate education for 2016-2017, in thousand tenge
 Note - Compiled on the basis of the source: Electronic resource: Data of the Ministry of National Economy of the Republic of Kazakhstan for 2016-2017, //https://economy.gov.kz

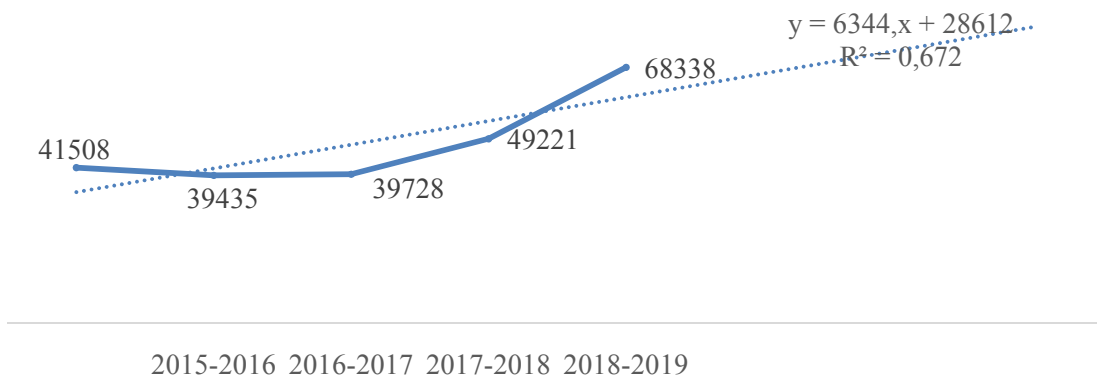


Figure 3 - Dynamics of the state order indicator for the training of personnel of the Ministry of Education and Science of the Republic of Kazakhstan for the period from 2014-2019
 Note - Compiled on the basis of the source: https://economy.gov.kz

Of these, the funds allocated by the Ministry of Education and Science of the Republic of Kazakhstan for training in undergraduate, graduate and doctoral programs testify to their increase as of 2019 (Figure 4) [21].

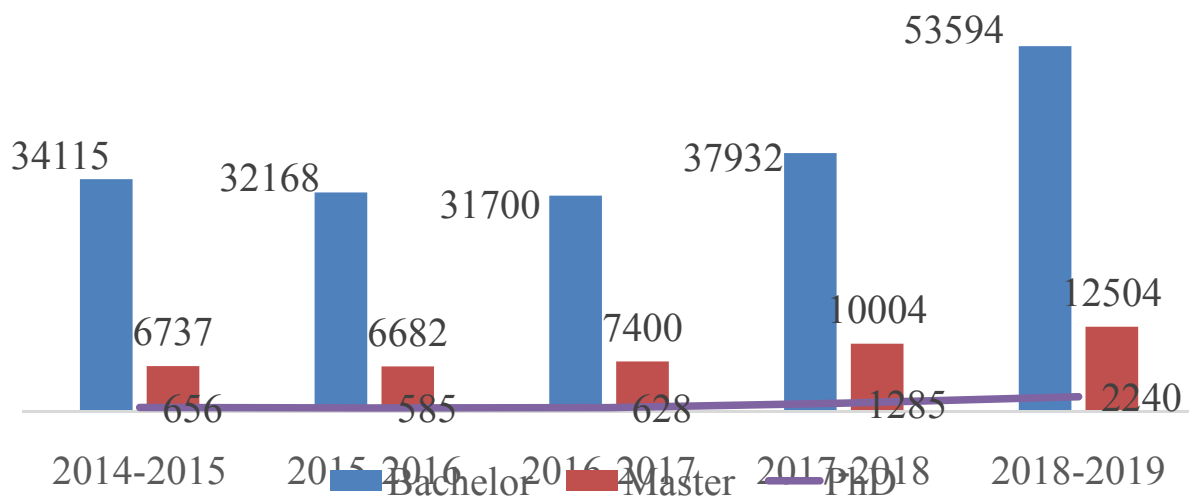


Figure 4 - Dynamics of the indicator of the state order for the training of the Ministry of Education and Science of the Republic of Kazakhstan in undergraduate, graduate and doctoral studies for the period from 2014-2019
 Note - Compiled by the author based on the source: National Report on the Status and Development of the Education System of the Republic of Kazakhstan (for years of independence), IAC, 2017 - p.21

Taking into account the implementation of the Nation's Plan "100 concrete steps" on five institutional reforms and the "Five Social Initiatives of the President", as well as the main provisions of the President's annual messages to the people of Kazakhstan, the key priorities of the country's socio-economic policy are also improving the quality of human capital by ensuring accessibility and improving education, transforming the health system, productive employment, and a fair social security system through nature [25].

Human capital is becoming the most important factor in the country's economic growth, the basis of its sustainable development, the creation of a "smart economy". The progress of the Kazakhstani quality assurance system is underscored by the recognition of two Kazakhstani agencies, IAAR and NAOKO (formerly IQAA) at the international level. In 2016, IAAR and in 2017 IQAA became full members of ENQA successfully entered the EQAR.

To improve the position of Kazakhstani universities in global rankings, it is necessary to develop a strategy for the internationalization of higher education in Kazakhstan. This strategy will include key issues such as:

- improving the quality of education,
- attracting foreign students (educational hub),
- international reputation of universities,
- the quality of research and scientific development,
- attraction of foreign scientists,
- academic mobility of students and faculty, etc.

The adoption and implementation of such a program document will allow Kazakhstani universities to enter new markets for educational services.

In general, this will contribute to improving the quality of higher education and the high level of preparation of Kazakhstani students for the global labor market, as well as the accumulation of high-quality human capital in the country.

Conclusions - Human capital is the most significant resource of society, which characterizes the pace of economic development and scientific and technological progress.

The increasing importance of human capital as a driving factor in the development of the economy has led to the concept of sustainable development, in which the formation of a strategy for managing human capital becomes one of the key development factors [26].

Modern practice of training and development of human resources in leading companies has achieved significant results. The costs of training and staff development began to be perceived as investments in the

development of human resources that could bring a positive economic effect in the future. The effectiveness of such investments is expressed not only in increasing the company's income, but also in increasing the loyalty and motivation of employees as a whole.

Investments in human capital are the most profitable investments of the state. Given that Kazakhstan is preparing for a more advanced technological and digital future, the country has the opportunity to equip its youth with health, knowledge and skills that will enable them and their country to succeed. The Human Capital Index is a very useful tool to compare Kazakhstan and see what else needs to be done [27].

ӨОЖ 331.5

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ҰЛТТЫҚ ЭКОНОМИКАНЫ ДАМУДЫҢ НЕГІЗІ РЕТІНДЕ АДАМИ КАПИТАЛДЫ ТИІМДІ БАСҚАРУ

Аннотация. Қазақстан өз тәуелсіздігі жылдарында іске асырып жатқан институционалдық және құрылымдық реформалардың басымдықтарының бірі елдің адами капиталын дамыту мен өсіру үшін жүйелі жағдайларды қалыптастыру болып табылады. Адам капиталын дамыту мәселесі әрқашан мемлекет пен қоғамның даму стратегиясын айқындайтын тұжырымдамалық құжаттардың, сондай-ақ елдің саяси басшылығы қабылдайтын нақты іс-әрекеттердің фокусында болды. Адам капиталының бірінші жоспарына шығу-бұл қазіргі заманғы әлемдік үрдістердің бірі. Адам капиталы – Қазақстан Республикасының экономикасын дамытудың негізгі өндірістік және әлеуметтік факторына айналған елдің ЖІӨ-ні арттыратын ХХІ ғасырдың басты экономикалық ресурсы.

Қазақстан Республикасының нарықтық экономикаға көшуі адам ресурстарының жоғары сапасын қамтамасыз ететін тиімді жүйелерді құру қажеттілігі туралы мәселе қойды, олардың ерекшелігі:

- біріншіден, адамдар кәсіби қызметке көп кірген сайын, олардың өмірлік және кәсіби тәжірибесі көп жиналады, соғұрлым оларға кәсіби міндеттерді сапалы шешу үшін аз уақыт қажет, соғұрлым олардың үлкен құндылығы бар;

- екіншіден, бұл әлеуметтік басқарудың күрделі нысаны;

- үшіншіден, қызмет түрлерін кәсібилендіру кәсіпқойлардың қалыптасуы үшін үлкен капиталды қажет етеді;

- төртіншіден, ұйымдағы кәсіпқойлар қызметінің жоғары тиімділігіне олардың мүмкіндіктерін ұтымды басқаруды құру арқылы қол жеткізіледі.

Кілтгі сөздер: адам әлеуеті, адам ресурстары, адам капиталы, бәсекеге қабілеттілік

УДК 331.5.

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ЭФФЕКТИВНОЕ УПРАВЛЕНИЕ ЧЕЛОВЕЧЕСКИМ КАПИТАЛОМ КАК ОСНОВА РАЗВИТИЯ НАЦИОНАЛЬНОЙ ЭКОНОМИКИ

Аннотация. Одним из приоритетов институциональных и структурных реформ, реализуемых Казахстаном в годы своей независимости, является формирование системных условий для развития и роста человеческого капитала страны. Вопрос развития человеческого капитала всегда находился в фокусе как концептуальных документов, определяющих стратегию развития государства и общества, так и реальных действий, предпринимаемых политическим руководством страны. Выход на первый план человеческого капитала - это одна из современных мировых тенденций. Человеческий капитал – главный экономический ресурс ХХІ века, повышающий ВВП страны, который превратился в основной производительный и социальный фактор развития экономики Республики Казахстан.

Переход Республики Казахстан к рыночной экономике поставил вопрос о необходимости создания эффективных систем, обеспечивающих высокое качество человеческих ресурсов, особенность которых состоит в том, что:

- во-первых, чем больше люди включены в профессиональную деятельность, тем больше у них накапливается жизненного и профессионального опыта, тем меньше времени им требуется для качественного решения профессиональных задач, тем большую ценность они представляют;
- во-вторых, это самый сложный объект социального управления;
- в-третьих, профессионализация видов деятельности требует большой капиталоемкости для становления профессионалов;
- в-четвертых, высокая эффективность деятельности профессионалов в организации достигается созданием рационального управления их возможностями.

Ключевые слова: человеческий потенциал, человеческие ресурсы, человеческий капитал, конкурентоспособность.

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