

## **Development of the Individual in the Cultural Context of National Priorities, the Development of Human Capital in Kazakhstan**

*Totykyz Mantayeva, Kunduzay Aubakirova, Zhahan Moldabekov,  
Zaure Sarsenbayeva and Mukhtar Izotov*

Kazakh National University named after al-Farabi, Kazakhstan

---

**Abstract:** The formation of knowledge based economy-important new scientific direction to meet the challenges of the transition of Kazakhstan export commodities referral innovative development based on indigenous innovation and technological upgrading industries, only innovative model of development will improve their competitiveness and to ensure equitable integration into the world economic development. Another component of the knowledge economy-the creative personality, creativity, that is the creation of a transition economy based on knowledge, innovation and high technology.

**Key words:** Human capital • Human factor • Knowledge • Kazakhstan • Socio-economic development • Culture • Modernization • Innovation

---

### **INTRODUCTION**

The experience of world practice shows that the efficiency of the economy and the progress of material production depends to a large extent on the evolution of the components of human society than the laws of economic development. Therefore, the main objective of economic and social progress is not to accelerate the development of the market economy, but to ensure that every opportunity to realize their potential for healthy, active living creatively. Thus, the human factor in the innovation economy is more important than the traditional economy. It needs workers with search mentality, creative intuition, a clear vision of what should result in one or other new technology. Intensive social development is impossible without increasing the creative and moral capacities of its citizens, without a national innovation system that is driven by the massive development of innovations. It is creative and initiative of the employees, their ability, including building their own purpose, career and through it to provide enterprise prosperity. That is why now at the forefront of innovation objectives of the education system, which is based on the development of critical and creative thinking, as potential properties and resources of an innovative breakthrough. Only on the basis of quality of human capital accumulation is possible the progressive development of a country.

Today, the main form of wealth is outpacing the level of intellectual and spiritual development of the people, taking the form of human capital and providing the innovation process in every sphere of human activity. The task of human development today is formulated as a key national objective of modernization of a number of contemporary social sectors-education, culture, health, science and which are considered in the first place as the sector's capitalization human Kazakhstan. Today, the modernization of Kazakhstan's economy is based on accelerated diversification and competitiveness of the national economy by reducing its dependence on raw materials. "In the context of the global crisis, we have seen that we have no alternative to industrialization, we cannot rely on the minerals, oil, gas and metals. We have to create the industry of Kazakhstan, which actually was not. We were raw state in the Soviet Union and the years fought for their state when they came out on the path of growth, it is now possible to do almost the industrialization of the country" [1]. In the past, light and food industries traditionally defined specialization of the country, they were given 15 and 18% of total industrial output, as well as mechanical engineering and metal-working, well-performing leading-mining and agriculture. During the time of establishment of the first industrial-innovation program since 2003 the share of manufacturing industry in the industry declined from a

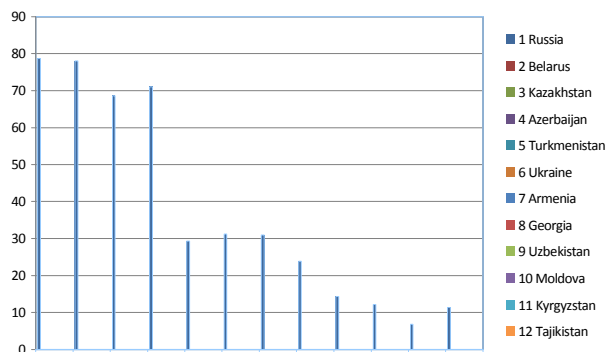
level of about 40% to 28%, also mining-has grown from about 50 to 63%. About the same amount (from 65% to 77%), the share of exports of mineral products in total sales. In the program of forced industrialization (2010, 2014) placed the task of increasing the share of manufacturing in GDP to at least 12.5% and non-oil exports in total exports-and not less than 40%.

Industrial-innovative development of the country it is difficult to implement without a break through in engineering, whose share in the total volume of industrial production fell from 15.9% in 1990 to 2.8% in 2008 and the depreciation of equipment ranges from 43% to 80%. Planned new construction and modernization of existing businesses by foreign technology transfer on the basis of public-private enterprise.

Urgent strategic task for the CIS countries is to ensure the innovative development of the national economies, as only an innovative model of development will improve their competitiveness and to ensure equitable integration into the world economic development.

Between 2000 and 2010, GDP growth increased in the CIS countries per capita in teaching staff dollars in CIS countries (in%) [2, p.14].

No	Countries	Percent
1	Russia	78.7
2	Belarus	78.09
3	Kazakhstan	68.66
4	Azerbaijan	71.02
5	Turkmenistan	29.35
6	Ukraine	31.21
7	Armenia	30.95
8	Georgia	23.9
9	Uzbekistan	14.32
10	Moldova	12.19
11	Kyrgyzstan	6.83
12	Tajikistan	11.41



President of Republic Kazakhstan N.A. Nazarbayev, speaking at the anniversary of the Al-Farabi KazNU, in its report "Kazakhstan in the post-crisis world: intellectual breakthrough into the future", emphasized that

"Kazakhstan needs an intellectual revolution that will awaken the potential of the nation. Our task-to change the attitude of Kazakhstan and especially young people, to education, to the intellect, to his motherland and the people". Today important breakthrough in the development of education in Kazakhstan: each person must instill the ability to do, learning to learn, learning to live together in the modern world. Now the person is living in a highly technically environment. It creates technical systems have radically changed the way of thinking and behavior, increased the responsibility of each person responsible for their actions and society-for training with competitive human capital. Knowledge-based economy-important new scientific direction to meet the challenges of the transition of Kazakhstan export commodities referral innovative development based on indigenous innovation and technological upgrading of industries. Analysis of the essence and the history and evolution of the functioning of scientific and technological potential of developed countries shows that it is science is the basic structure of innovative economies of these countries, providing not only secure the mass production of innovations both fundamental and applied, but also the quality of life, competitiveness in a globalizing world and most importantly-increasing adaptability of humanity, not only for the challenges of global, but the cosmic scale. During the years of independence, Kazakhstan has managed to rise from 109 (early 1090's) and 51 seats (up to this year) in the prestigious ranking of the World Economic Forum. In 2011 Kazakhstan had only 72 place.

In the meantime, the share of high-tech innovation of domestic production remains very low, according to the Fund of Kazakhstan it is only 1.1% of GDP. In comparison, for Russia-2.5-4.5%, in the EU-by 40-90% [3].

We believe that an important component of the knowledge-based economy is the man-the only element that can produce value, everything else-credit, raw materials, plants, first-class equipment-only inert profit potential. Innovative economy needs workers with search mentality, creative intuition, a clear vision of what should result in one or other new technology. It is creative and initiative of the employees, their ability, including building their own purpose, career and through it to provide enterprise prosperity. President of Republic Kazakhstan N.A. Nazarbayev in his address to the nation said that "digital and nanotechnology, robotics, regenerative medicine and many other scientific achievements will be everyday reality, transforming not only the environment, but also the man himself.

We need to be active participants in this process"[4]. Intensive social development is impossible without increasing the creative and moral capacities of its citizens, without the innovative creation of a national system that is driven by the massive development of innovations. It is a shift from the "economic man", for which the main thing-do not work and consumer choice, the model of "creative person", to create an economy based on knowledge, innovation and high technology.

In the twenty-first century, an important indicator in determining the effectiveness of the state's economy is the quality of life. In forming the innovation system at the state, region, company, focused on the creative potential in the first place there is the quality of the person, which is defined as the quality of education as well as the ethical and moral standards in the context of globalization, the peculiarities of which humanity is so hard to adapt the present stage of its development. To do this, the state should focus on the real and sustainable growth of the lives of its citizens on the basis of transfer all domains to an innovative type of development. Quality-the most accurate and general indicator of post-industrial society, which reflects the process of further strengthening the economy's dependence on the innovation process. All this is reflected in the program, "Intelligent Nation 2020", which is based on 3 projects:

- Breakthrough in the education system of Kazakhstan. Each person is instilled an ability to make, learning to learn, learning to live together in today's changing world, that is "four pillars of education", formulated by UNESCO. In this pre-school and primary education should remain the global launch expertise and good health of young Kazakhs. They must distinguish between inquisitive minds, a boundless love for knowledge and vitality. Secondary education is responsible for the education of active, educated and motivated for success of the individual. Students must learn the truth: "Never stop start, never begin to cease". Updated national universities of the country, the intelligent school "Bolashak" Nazarbayev University in Astana must be ready to make this breakthrough in education;
- The national program "Intelligent Nation 2020" is aimed at the development of science and improving the scientific potential of the country as the basis for an innovative economy. Four areas of science-biotechnology, biochemistry, eco-energy (anti-aging) will have a major impact on scientific and technical picture of the world;

- The development of systems of innovation. To maximize the impact of available resources requires new technologies, know-how. Today Kazakhstan requires an "explosion" of innovation. Business should use long-term projects, adapt and work on them. In developed countries, SMEs provide over 50% of all innovations and 70% of employment. Similarly, our companies and investors must in law to allocate funds from the profits of the innovative research and development and employee training. It aims to promote the recently adopted Law "On state support of innovation".

Background study is related to the objective difficulties innovative projects of local enterprises. Mass production, requiring more extensive organization promoting the spread of centralized structures, industrial production has brought to a standstill. The latter forced the state to recognize that small businesses can coexist with multinational companies and the use of technological advances and the entrepreneur is a key player in the economy. J.A. Schumpeter entrepreneurs attributed to the engines of technological progress, has a special ability to create new combinations of means of production and the implementation of innovations. In his opinion, only individuals capable of innovation, have imagination, initiative and will provide a link between science and invention with the economy and deserve to be called entrepreneurs.

N.I. Lapin in research "The theory and Practice of Innovation" summed up the experience of innovative processes in the Soviet and post-Soviet Russia. According to him, since the mid 1970-ies of XX century exhausted administrative command system of STP, which provided the previous successes of the USSR and the alleged other germs, proactive, network structures were drowned. The efficacy of Russia's transition to innovative development requires not return to the administrative and organizational monsters and a mixed network of the national innovation system (NIS). Basic premise of this type of research vessel development the institution of venture businesses, including public-private partnerships.

Business venture-a new social and economic institution to receive the second half of the twentieth century is the rapid development in the U.S., Western Europe and Japan. Along with a small firm, venture fund becomes a second locomotive that pulls the innovation process in the early, most risky and difficult stretches of the river and then forces the traffic to maximize success.

It is not only financial, but also organizational and managerial locomotive, comprising of managers who specialize in the implementation of innovations.

Today it is the small businesses are able to constantly adapt to the environment, using all kinds of innovations. Therefore, small business plays a great role in the development of new industries, such as biotechnology and electronics. The history of business shows that a particular impact on the innovative development of the countries has a structure of small and medium businesses. Besides global experience shows that to overcome innovation stagnation only through investment impossible. This was largely due to non-economic factors, with a tendency for enterprise management risk aversion, fear of taking responsibility, as well as the presence of numerous barriers to the creative innovators, both organizational and psychological. There was a specific situation in which, despite the country significant technological achievements, a highly qualified workforce, a unique scientific and industrial base, there is a weak focus on the practical use of innovative potential and profit from innovative projects.

The government not only provides the necessary funding, but it can play a crucial role in networking, attracting leaders in science, technology, finance and entrepreneurship that are essential for innovation.

For developed countries, the maintenance of the innovation process is imperative and each of them set up for the purpose of dynamic innovation system (IS) that meets its needs, characteristics and realities of history. However, for the creation and replication of innovations require not only science and consumer of last-production that can take to achieve it. Need the appropriate socio-economic infrastructure, that is, favorable economic conditions, financial, legal support, etc.

According to the development of American researchers M.E. Porter and Laurence Sterne to indices of innovation include: the number of research personnel involved in R andD spending on higher education, the scale of investment in R andD and volume of scientific research financed by industrial firms, the share of R andD performed by college and university science sector, the degree of protection of intellectual property and the activity of public policies that encourage investment in innovation and commercialization, the opening of international competition. Thus innovation indexes defined knowledge-based economy, the national innovation potential to be competitive in the long term. [5, p.45].

Hence the importance of understanding the theoretical and methodological, organizational, economic and legal foundations of innovative development of the individual in a professional environment. Specialists on innovation will provide a comprehensive study of the national innovation system model, which includes an overall national strategy, approaches to reform science, technology and innovation sector, evaluation of rational parameters of innovation capacity, public policy, reflecting both the global patterns and internal features of the state's influence on the development of science and technology.

Public policy must be flexible, focused on the realization of benefits of technological leadership of individual sectors and the transition to the new technological order in degraded sectors, harmonization process coupled production levels and increase on this basis competitiveness [6].

Modernization of the national economy is not possible without the active intervention of the state, as market mechanisms are not able to adjust the process. Small business is one of the institutional framework for the formation and development of innovative economy, because in his nature to property creativity.

Experience in developed countries shows that the solution of this problem is possible by means of state measures to support innovative entrepreneurship. Therefore, the task of the state is the realization in practice of measures of support and development of small business.

Law of the Republic of Kazakhstan dated 23 March 2006 "On state support of innovation", states that the purpose of implementation of the state support of innovation are:

- The development of innovative potential of the Republic of Kazakhstan;
- Increasing the proportion of high-tech products in the gross domestic product;
- To facilitate the transition of the economy of the Republic of Kazakhstan on the path of innovative development based on the deployment and use of high technology.
- Principles of state support of innovation are:
- Compliance with the national interests of the implementation of innovation;
- Equality of innovation activities in obtaining state support for innovation;
- The complexity and system, providing constant interaction of innovation activities;
- Transparency of the state support of innovation.

It aims to create a complete innovation infrastructure, including the organization of a number of new enterprises and funds for innovation, the implementation of measures to modernize the economy based on advanced science and technology.

Besides moral resources business, which affect the efficiency of the economy should be regulated by the state through the establishment of mandatory rules that take into account moral compass, the needs and demands of the society. Mandatory rules of neutrality mean that they are in relation to economic competition. That allows us to formulate moral standards and ensure their applicability in practice.

The presence of creativity in the development of small businesses explains its ability to react quickly to changing market conditions, the sensitivity of the emerging innovations. Note that in the developed countries and 70% of all innovations create and master the innovative small and medium enterprises.

In Kazakhstan the formation and development of small enterprises engaged in innovation, runs hard and slow. Such enterprises survive because we were able to find a niche in the market of high-tech products. Problems of formation of new innovative enterprises with a high risk characteristic of the innovation sphere.

The end of the twentieth century brought a radical change in the structures of employment and the labor market in the country. Today, a growing awareness among economists that the people-being complete and the assumption of the uniqueness his role as a consumer of goods or provider of labor, abstracting from all other aspects of his life greatly impoverished the economic analysis.

In fact, the individual performs a variety of roles (professional, consumer, family, educational, civic, etc.), which have on one another strong influence. If it cannot be fully realized, for example, the role of the consumer (for example, because of trade deficit, compared to the exorbitant salaries and prices), weakened motivation to work, less realized and professional role. If infringed his civil status, he often will accept less favorable conditions of employment, work on verbal agreements, etc. The poor, low-income strata of relatively more labor rights are violated, they are less active they are protected and significantly less than other layers in on the success of the human rights conduct. All this, of course, affect the qualitative features of the consumer market, institutions, businesses, employees etc.

In this regard, the Director of the International Institute for Educational Planning of UNESCO ShackAllakov, talent and creativity-are derived from

life experience, held the act of experiencing life from the organization and the nature, degree of comprehension, order and integrity awareness of distance traveled [7].

Innovative development envisions a system of social institutions, in which the individual has sufficient degrees of freedom in regard to the ways and forms of development and realization of one's potential.

For the development of intellectual and communicative components of the creative person needs a particular organization of the educational process: joint productive activity, creative tasks and their social significance. "The school should help people discover and then keep the incompleteness of the world. Obviously, living in a constantly changing, unfinished world can only creative person, not afraid to be unfinished, ready to take risks in developing and constructing itself in the world and capable of creative expression"[8].

The success of the innovative activities of young people depends on the mechanisms of their personal growth-civil identification, legal education, the development of communication and leadership traits, self-determination in their profession and work. Lack of development and the involvement of young people in an innovative creative activity, lack of educational institutions of social partnership with others to promote the assimilation of the younger generation of social and educational values ??in society, lead to negative consequences. Time requires a clear vision of the mechanisms of socialization of young people, identifying patterns, factors and effective means of their formation and the criteria for assessing performance.

First you need to create a comprehensive system of transfer of technology and knowledge. Should establish an effective system of management of innovative technological development.

This is the essence of the "Intelligent Nation-2020", aimed at creating a new generation of Kazakhs. Without this, we cannot turn Kazakhstan into a country with competitive human capital [9].

## **MATERIALS AND METHOD**

Intellectual potential-an integrative concept that combines science, education, technology, all kinds of intellectual property and its subjects. Intellectual potential of Kazakhstan-its national treasure, opened for him the possibility of innovation dynamics and maintain the proper level of civilization development.

Becoming in our country the knowledge society is not a society in which there is "knowing elite" and society, where knowledge is living in an atmosphere of everyone. In a situation where everyone is always has a choice, before it must be information that allows you to make this choice consciously. A man develops in expanding the range and capabilities of the intellectual, social, economic and political choice, through the expansion of opportunities, not only due to economic growth and living standards. Innovation culture is a mechanism of innovative behavior as a special type of individual and group behavior, which is characterized by initiative and systematic development of new ways of life. Innovative culture personality reflects a holistic orientation rights on innovation, this orientation is the motive, knowledge and skills, as well as in the images and behaviors. The essence of the innovation culture of an organization is revealed in characteristics such as:

- Motivation of workers to the development of knowledge and innovation;
- Focus on results;
- Working in a team;
- Striving to achieve professionalism;
- Ability to communicate with colleagues at seminars, exhibitions, conferences (outside of work);
- Freedom of expression of thoughts, ideas, freedom of creativity.

With increasing culture of innovation in the field of economy, there are specific acceleration and efficiency of the implementation of new technologies and inventions and in the management of real-counter bureaucratic tendencies, in education-promoting innovation disclosure of personal potential and its implementation, in the field of culture-the optimization of the relationship between tradition and update, different types and kinds of crops. The motto of the new century to become Kazakhstan's competitiveness and integration into the global processes. Based on this republic-wide, regional, industrial policies should be evaluated by a single criterion-does it strengthen or weaken the competitiveness of the country. Countries that today have high competitive advantage in the future will not be able to successfully compete in the market in terms of research, innovation and high technology. How good is the level of health, intelligence and education of every citizen will be so high competitiveness of the state within the world community. "Our main objective for the coming years will be the implementation of the State Program on Forced Industrial-Innovative Development of Kazakhstan. The task of updating the innovation economy more competitive-it's a matter of survival of the country in the future. It is synonymous with independence"[10, p.6]. Evaluation of nominal GDP of the leading countries of the world and Kazakhstan (in billion U.S., according to the IMF) in 2008, 2014 years.

Database 2009, 2014-prediction.

No	Country	2008	2009	2010	2011	2012	2013	2014
1	World	60917	57228	60495	63429	66834	70570	74660
2	EU	18387	16190	16868	17308	17874	18433	19054
3	USA	14441	14266	14704	15326	16008	16729	17419
4	Japan	4910	5048	5187	5267	5410	5591	5791
5	China	4327	4757	5263	5843	6524	7287	8283
6	Germany	3673	3235	3325	3358	3397	3443	3485
7	France	2866	2634	2745	2823	2907	2998	3089
8	United Kingdom	2680	2198	2353	2472	2611	2758	2919
9	Italy	2313	2089	2172	2204	2246	2296	2355
10	Russia	1676	1254	1363	1532	1706	1896	2127
11	Kazakhstan	135	107	120	138	154	173	199

So, in Kazakhstan, the human capital as a factor of social and economic development has not yet formed, as economic growth, the benefits provided cheap raw materials and labor. Education is recognized as one of the priorities of long-term Strategy "Kazakhstan-2030". The overall goal of education reform in Kazakhstan is to adapt the education system to the new socio-economic environment. Kazakh president was also given the task of joining the Republic in the 50 most competitive countries of the world. Improving the education system plays an important role in achieving this goal. International

experience has shown that investment in human capital and in particular in education, from early childhood through adulthood, contribute substantial returns to the economy and society. Investment in human capital is critical to the creation of technologically advanced, productive workforce that can adapt to the rapidly changing world. Successful economies of the future will be those that invest in education, skills and abilities of the population. Education must be understood as economic investment and not just as social spending. Accordingly, today education is expanding its function: it is converted

from the training and education system in complex synthesized development opportunities that a person can use at their discretion. He can prepare themselves for the work that is most important, to develop their creative and intellectual abilities, to get acquainted with the cultural and historical heritage.

In addition to the economic benefits of education creates other social benefits, promotes the formation of social capital—a society with a high degree of citizen participation, a high social responsibility, cohesion and integration. From an early age, education plays an important role in shaping the social, emotional and other essential skills. These are the compelling arguments in favor of further development of the full range of educational services. Kazakhstan needs radical modernization of education: a significant and sustained increase in investment in education and improving its quality.

**Decision:** Therefore, we propose a new national vision: by 2020, Kazakhstan-educated country with a smart economy and a highly skilled work force. The development of education should be the platform on which to build the future of the economic, political, social and cultural prosperity. Organizational basis for the realization of the state policy of the Republic of Kazakhstan in the field of education should be Strategy "Kazakhstan-2050", aimed at providing, since 2013 the development of engineering education and advanced technical specialties with awarding of certificates of international standard. Vocational and higher education will be aimed primarily at meeting the current and future needs of the national economy for specialists. In many ways, this will solve the problem of employment. Kazakhstan is now a party to the main international instruments in the field of education, human rights and child. These are: the Universal Declaration of Human Rights, the Convention on the Rights of the Child, the International Declaration of economic, social and cultural rights, the Lisbon Convention on the Recognition of Qualifications concerning Higher Education in the European Region, the Bologna Declaration and others. In accordance with the Bologna Agreement, adopted in 1999. "The search for solutions to the problems associated with the increasing mobility of students, creating single educational instruments that will improve education, regardless of the location of the student and the educational institution." The formation is continuous. It acts as a form of adaptation to the new requirements of the employer, as well as to the cultural and linguistic environment in which he finds himself. Education unified.

There are actually achieved quality objectives for the development of human capital through investment in education. The structure of education is aligned with the International Standard Classification of Education. The conditions for the introduction a 12-year-old model of learning. Restructured technical and vocational education. Introduced a three-level training: Bachelor-Master-Doctor PhD Approved Classifier of undergraduate and postgraduate education of the Republic of Kazakhstan, containing aggregated groups of professions. A National Quality Assessment of Education, incorporating elements of an independent external evaluation (licensing, certification, accreditation, rating, unified national testing (hereinafter-UNT), the intermediate state control (hereinafter-PGA), a comprehensive testing of applicants and others). Started the implementation of regional systems for evaluating the quality of education in all regions of the country.

Strengthening the material base of educational institutions. In secondary education, there are problems related to both the weak material and technical, educational and methodological base and the need to update the content and teaching methods. A characteristic feature of the education system of Kazakhstan is the presence MK Sh which constitute 56.5% of the total number of schools (in 2005-52%). In particular, in rural areas-68.6%. The system of technical and vocational education (TVE) plays a key role in meeting the interests of the individual, the needs of the labor market and the prospects for the economy and the social sphere. To ensure professional technical and service performed on 177 specialties and 416 qualifications. However, lack of labor market standards have advanced qualifications to specialists cannot provide the adequate maintenance of the training needs of industry and employers. The existing infrastructure and material equipment type system does not provide the quality of training and education for youth appeal. Low motivation of engineering teachers to teach high-level causes an outflow of highly qualified personnel in other areas of the economy. Poor management does not provide a competitive education market conditions.

Low funding costs and the cost of training one specialist in the state educational order not promote getting learners modern qualifications. In addition, to be decided long learning and training throughout life. Economy and society based on knowledge, learning throughout life—must be a way to solve the problems of competitiveness and the use of new technologies to improve social cohesion, equal opportunities and quality of life. In 2010, Kazakhstan ranked 66th of 169 countries in

terms of human development, improving its position by 11 positions compared to 2009 and for the second year in a number of countries with a high HDI. Newsweek magazine in 2010 rated the top 100 of the world has shown that the level of literacy of Kazakhstan ranks 14th. First place-Finland, Russia 31 spot. Kazakhstan also has the best system of education among the middle-income countries. The last two years, Kazakhstan is in the top four countries in the Index of Education, UNESCO and in 2009-even headed the rating. Education for 2011-2020 higher education plays an important role in the training of competent and competitive professionals to all sectors of the economy in the integration of science and production.

Currently operating in Kazakhstan 148 schools (9 national, 2 international, 32 national and 12 non-civil, 93 private, including 16 joint-stock), which caters to over 595 thousand people. Although the average European standards of the number of universities should not exceed 58 and an average of three universities in a million people, or we have 16 million people should be 58 universities. However, most employers are not satisfied with the quality of training, produced universities. Education programs do not always meet the expectations of employers and do not meet the needs of the economy.

Lifelong learning will cover learning from pre-school age and ending postretirement (60-65 years), including a range of formal and informal learning. Employers will be involved in co-financing of training programs and the development of flexible circuits, allowing each employee to participate in lifelong learning.

To implement the directions of industrial-innovative development of the country will be created on the basis of existing schools:

- Three business incubator: in 2014-one in "Energy", in 2015-one in "Oil and gas sector infrastructure", in 2016-one in "Chemical Industry";
- Three industrial park: in 2014-one in "Basic metals and fabricated metal products", in 2015-one in "Mechanical Engineering", in 2016-one in "light industry";
- Centers of commercialization of scientific discoveries-the Kazakh National University named after Al-Farabi (2014), East-Kazakhstan State University named S.Amanzholov (2015), the Kazakh National Technical University named after K. Satpayev (2016).

Since 2015, "Nazarbayev University" will produce highly qualified professionals and young scientists Since 2016 will be:

- Developed educational programs in cooperation with foreign partner universities included in the top 10;
- Scientific research in the priority sectors of the economy to create a high-tech and high-tech industries;
- Conducted cooperation with partner universities and foreign research centers, specialists, equivalent content.

In 2020, the priority of the education system is to create conditions for the provision of education, adequate needs of Kazakhstan and allows you to fully realize the creative and intellectual potential of every individual. Vocational education system of Kazakhstan should be as open to the public and provide an opportunity for every citizen to receive basic professional at the desired level. It could be a short training program, as well as regularly updated and optimized for the term of a set of modular training programs, professional qualifications for effective adaptation to the demands of the labor market. With this model will allow maximum sustained educational programs of professional education since Scorecard education (credit and student record system) will allow to accumulate credits, leading to an academic certificate (diploma) Bachelor's or Master's degree in various programs.

The innovative character of vocational education will be achieved through the restructuring of the system, which will create the necessary conditions for a change in approach to learning. Project work will replace the process of retelling the content of textbooks. For the new model will be characterized by participation in research and development, participation in the actual production. The principle of openness will integrate many educational programs and real production through the provision of educational services to leading enterprises.

We need a new wave of technocrats. We must encourage and support domestic talents, professionals. By the President of the country Nursultan Nazarbayev said in Almaty on the forum "Innovative Kazakhstan-2020".

President urged to pay close attention to the role of domestic inventors. According to statistics, every year comes to 1000-1500 patent applications. Much higher-innovations. "But these figures are scanty for us. You should consider the issue of providing solid long-term grants successful professionals working in technological innovation parks, business incubators. "I propose to consider the projects" Hundreds of new talent", "Top 100 Innovators", "President's Club absolute innovation".



These people should be constantly encouraged and supported. These grants must be assigned special honors.

### **CONCLUSION**

Integration of education, science and industry, the development of postgraduate education based on modern science and technology are some of the priorities of the economy.

Today, the most dangerous thing in the reform of education-its pragmatism and standardization. Transition to a knowledge-based assessment tests students focuses on memorization and guessing the correct answer and not on the intelligence and a creative search. It's more of an educational anti innovation that adversely affect the thinking of future generations and contrary to the general trend of creative diversity of personality in the humanitarian and creative post-industrial society [11, p.360].

The positive and promising areas include high rates of information learning processes. Today, the system is changing and the organization of education in lifelong learning, covering all stages of the modifications of the life cycle-from pre-school to retirement. Kazakhstan has not developed the institutional forms of support for innovative structures that perform development and ensuring sharing the results of research and development work to make them possible. Therefore, in Kazakhstan the share of scientific development is below the level considered acceptable in developed countries, more than ten times. To improve the competitiveness of education, human capital development by providing access to quality education for sustainable economic growth is necessary to:

- Improvement of the system of financing, focused on providing equal access to educational services;
- Increase the prestige of the teaching profession;
- The formation of public-public system of education management;
- To ensure equal access for all participants in the educational process to the best educational resources and technology;
- Full coverage of children quality early childhood care and education, equal access of children to various programs of pre-school education to prepare them for school;
- Formation in schools intellectually, physically and spiritually mature citizen of the Republic of

Kazakhstan, the satisfaction of their needs for education that ensures success in the rapidly changing world, the development of competitive human capital for economic prosperity of the country. Transition to a 12-year education model;

- Modernization of the VET system in accordance with the needs of society and the industrial-innovative development of the economy and integration into the world educational space;
- A high level of quality in higher education that meets the needs of the labor market problems of industrial-innovative development of the country, the individual and the best international practices in the field of education;
- Maintenance of the system of education in lifelong learning; young people to develop active citizenship, social responsibility, patriotism, high moral and leadership qualities. updated content structure TVE to satisfy needs of industrial-innovative development of the economy.

This suggests that at this stage of development of Kazakhstan is a key role of education. The effective action for the recognition of learning outcomes of public and private training providers, by passing the resulting assessment of the level of qualification in independent agencies with the issuance of the certificates.

Thus, Kazakhstan has created a favorable environment for the development of individual potential for cross-cultural exchange, for the free expression of thought, for the implementation of innovative projects for implementation of creative ideas. This, in turn, causes the creation of a progressive educational system that will maximize the interests and requirements of the young nation.

### **REFERENCES**

1. "New ten years-New social and Economic Growth-New Opportunities for Kazakhstan". Astana, 2010.
2. Economics and statistics. No, 1, 2011.
3. Izvestiya Kazakhstan. 07.27.07.
4. Message of President Nursultan Nazarbayev "Kazakhstan 2050-Strategy established state// Kazhstanskaya pravda"// 14 December 2012.
5. Lebedev, E., 2007. Innovative development and education.//MEMO, no 12, 2007.
6. Innovation and technological development in Russia: 2005. problems, factors, strategies and forecasts. M.:MAKSPress, pp: 591.

7. AllakZh, M., 1993. Outlook to future: priority of education.
8. Gribov, Y., 1989. Terms of creative expression of students and teachers.//Questions of psychology, No 2.
9. Nursultan Nazarbayev Kazakhstan in the post-crisis world: intellectual breakthrough into the future.//Kazakhstan Pravda. October 14, 2009.
10. Nazarbaev speech at the VI session ANC 20.10.10//Mys 1, No 11, 2010.
11. Yakovets, Y.V., 2004. Epochal innovation XXI century. Moscow: Publishing House of the Economy, pp: 444.