# INNOVATIVE EDUCATION AS A FACTOR OF HUMAN CAPITAL GROWTH

Alexandr Semin, Manizha Atokhodzhaeva, Evgeny Tseytlin

Ural State Mining University, RUSSIA
<u>aleks\_ural\_55@mail.ru</u>
<u>manizhahon1980@gmail.com</u>
<u>tsem88@yandex.ru</u>

#### **Abstract**

The development of modern society poses a number of new problems to the domestic education system due to political, socio-economic, socio-cultural, technical, technological, environmental and other factors, among which the issue of improving the quality and accessibility of education due to the growth of human capital should be highlighted.

The fundamental processes taking place in the education system lead to the formation of a new ideology and methodology of education as an innovative direction in this key area today. Innovative learning technologies should be investigated as a mechanism for implementing a fundamentally new educational paradigm.

The main goal of innovative technologies in the field of education is:

- the developing the ability to motivate actions;
- the ability to use the latest achievements of science and practice;
- the formation of creative unconventional thinking;
- the preparing an individual for life in an ever-changing world;
- the qualitative change in the students' personality compared to the traditional system
- the ability of using digital technologies and distance learning to implement opportunities for providing on-the-job training;

The essence of such training is to focus the educational process on the potential of a person and their implementation. Education should develop mechanisms for innovation, find creative ways to solve vital problems, and contribute to the transformation of creativity into the norm and form of human existence.

All this becomes possible thanks to the introduction of didactic and educational programs that are not known in practice into professional activities, as well as new approaches to student training. Innovative activity in education as a socially significant practice aimed at moral self-improvement of a person is important because it is able to ensure the transformation of all existing types of practices in society.

**Keywords:** education, innovation, human capital, potential, quality of life, standard of living of the population, innovative teaching method

## I. Introduction

In the conditions of the modern world, characterized by a change in the educational paradigm, as well as the strengthening of the role of human capital in innovative economic development, the educational sphere acquires a new vector – growth and prosperity.

The processes associated with the modernization (innovation) of education, the development of newfangled technologies and techniques for acquiring relevant skills have ceased to be somewhat unique. The lack of individuality of the process is interdependent not only with the transition of a social society to post-industrialism, but also with a collision with spontaneous, unexplored and non-economic laws that do not depend on the desire and ability of mankind by phenomena such as the new corona virus infection (2020), which provoked forced social isolation, on the one hand, and rebuilt the ongoing economic processes caused by the need for communication in an alternative format with another.

It was an impetus to rethink the directions of economic development as the introduction of active interaction and long-term partnership in the scientific and educational sphere, both for leading technology giants and for small enterprises, regional scientific and educational organizations.

The Era of innovation requires attention and support for human capital, since this is one of the key factors in which a person and his abilities, knowledge can play an important role, declared not only at the national level, but also on the world stage. In this regard, science and education act as the main guide towards achieving the main goals of a global scale, such as the export of personnel and technology, finding innovative talents, increasing labor productivity, and promoting scientific and educational infrastructure.

The indicator of innovation activity is:

- The amount of invested financial resources;
- Transfer of decades of accumulated knowledge in various fields;
- Relevance and search for incentives due to in-depth research in the future.

The use and dissemination of knowledge contributes to the enrichment of a person as a person, and the educational environment as the results of scientific research and the process of formation of educational markets. According to analysts, the innovative educational market will reach \$404 billion next year (2025), and \$10 trillion in five years [8]. The dynamics of market growth is multidirectional and its high growth rates are most often observed in developed countries.

With regard to the structure of the Russian education system, the growth trend is observed in the share of online education due to some factors, such as:

- increased demand for online education;
- increased demand for IT professionals;
- strengthening digitalization processes;
- expanding the market for competitive platforms;
- Changing consumer tastes, preferences, and learning approaches.

By developing these processes, it will be possible to solve the tasks of ensuring the competitiveness of highly qualified specialists, which are based on innovative progress.

#### II. Methods

- the modern theoretical and practical development of innovation;
- · the statistical dates and analyses;
- the innovative approach to the reproduction of human capital;
- the determination of the impact interaction of science and education on human capital development in an innovative economy through an intersectoral transformation cycle, which demonstrates the role mechanism of reproduction of human capital.

#### III. Results

The application of the proposed recommendations by the state in practice and improvement of socio-cultural and economic policies in the future. The reliability of the statistical and factual

data used has also been determined. The results are justified by the confirmation of their publications in leading peer-reviewed scientific journals.

#### IV. Discussion

The level of education is a significant indicator of a person's quality of life. It acts as an integral part of human existence, determining its success. It acts as an integral part of human existence, determining its success. Specifically the education - is a key factor in the development of the economic situation in the country, since it contributes to the formation of public culture and the definition of progress in Technique and Technology, strengthening individual moral satisfaction with the standard of living.

Therefore, the head of state has frequently mentioned the importance of providing highquality education and the diverse development of social society in the contemporary world.

Today, the growth of human potential and its future success depend on the level and quality of fundamental education through innovation. The innovative method of teaching in schools and helps the preschool institution growing generation, the future personnel of our country to take the first, but very important step towards the well-being of their own lives. Certainly, for these purposes, it is necessary to create all possible conditions for expanding the networks of secondary education institutions so that children are brought up in the spirit of patriotism and professionalism.

Only educated and literate youth with modern skills and professions can contribute to the state development. Particularly for this reason that is important to pay attention to the education system's development, since the growth of literacy among the population is a factor determining the strength and prosperity of any state society.

Young people with innovative ideas and skills become active supporters of processes that directly lead to a better life. This is the only way to build a society based on innovative knowledge and high culture.

There are quite a lot of studies in science on the importance of increasing investment in education. In particular, Russian cultural critic Andrei Flier also noted that "The less money the ruling elite invests in culture and education today, the more it will have to invest in the police, justice and penitentiary system tomorrow [4]."

Therefore, the purpose of the Law on Education and Parental Responsibility for the Education and Upbringing of Children was to strengthen their obligation to lay the foundations for the physical, moral and intellectual development of the child's personality.

But, unfortunately, the problems that were inherited from the education system of the 90s have greatly worsened, even other newer ones have appeared, which did not take place at all earlier or were successfully solved by the authorities. The process of degradation in the education and cultural system of those years was accompanied by a lack of financial and logistical resources [1].

The volume of state funding for Russian education has significantly decreased. At the same time, therefore, there was a tendency for the indicator of spending on the educational sector to decrease as a % of GDP.

In those years, the decline in real spending on education and the average salary in this industry were precipitous. There was a significant deterioration in the state of the material and technical base of educational institutions.

According to the data, in government spending on education (in %) to GDP, there was a downward jump from 1991 to 2000 - from 3.6 to 3%. Also, the average salary in the field of education (in %) relative to the subsistence level has significantly decreased by several times - up to 85 [3].

Russia was not only different from developed countries, but also from European countries with economies in transition. The increase in the share of public spending on education in GDP allowed most of these countries to almost no to reduce spending on education at comparable

prices during the economic downturn that accompanied economic reform. In most of these countries, the average wage of education workers has not fallen below the average wage of those employed in the economy. Some education indicators financing during the economic downturn in European countries with economies in transition showed the opposite figures, in short, a tendency to increase significantly, especially when observing education expenditures (in%) to GDP [6].

Consequently, this situation has had a negative impact on the socio-cultural standard of living among the population, in particular:

- reduction in the number of students;
- increase in types of training on a commercial basis;
- decrease in publishing activities;
- closure of many libraries,
- houses of culture;
- reduction of visitors to theaters, cinemas, and museums.

Relatively the mental work has moved into the background.

### IV. Subsection Four

But, thanks to the measures taken, the skillful policy of the state has managed to achieve some positive results. Gradually, step by step, the situation began to change for the better. Starting in 2000, the country embarked on the path of creation and turned into a great power, in which the standard of living is quite consistent with many European states. Maybe not the most advanced, but we are only at the beginning of the journey.

The implementation of national projects has contributed to a serious change in the infrastructure of the population's life in such areas as:

- health;
- education;
- sport;
- agriculture.

It is clear that education could be done as in England or Switzerland. Nevertheless, there was a noticeable difference between what was and what has become: new schools, computer classes, the Internet and more. First of all, attention was focused on improving the population standards of living by increasing the level of education.

The educational space is built on the basis of basic academic values and demonstration of quality. Quality assessment covers teaching and research, leadership and management, the ability to meet student needs and the provision of non-educational services.

Quality in education is a fundamental condition for trust, relevance, mobility, compatibility and attractiveness in a given space.

As you know, in the Russian Federation, primary and secondary forms of education are mainly public, and in recent years a private form of education has been developing strongly. There is an opinion that the quality of the private form of education is much better than the public one, since it is dominated by an innovative modern teaching method.

However, in practice, even in government structures, education is gradually becoming more and more a paid service, but the quality of education is not improving. At the same time, according to parents, even a 20% drop in income does not lead to a massive rejection of paid education.

Recall that according to the Constitution, the State guarantees the accessibility and free of charge of preschool, basic general and secondary vocational education.

More than 60% of students after grade 9 go to colleges, technical schools and vocational lyceums for secondary special education, while a minority remains in schools.

Teachers have to work because of the remaining participants, although there is less and less demand for them. And schools receive funds from those who want to stay after grade ninth to study in high school and prepare for the Unified State Exam [7].

The desire for students to receive secondary special education is supported, because the country needs workers, not bloggers, as say.

Nevertheless, the experience of the top five countries in the world (Table No.1), where the level of education is the highest among the rest, shows that the transition to full-time paid education contributes to the development and achievement of a higher quality of education. However, in this matter, in the economic conditions of our country, there is a problem ... since a significant part of the population (middle-income population) has low purchasing power, there is a high level of idle production facilities, relatively high levels of poverty and unemployment remain, and this approach is not entirely acceptable.

The following table shows the ranking of countries in the world by level of education according to the UN data published by 2024 (the index is updated once within two to three years). The index is measured by the country's achievements based on the achieved level of education of the population by two main and necessary indicators: the adult literacy index; the index of the total proportion of students receiving primary, secondary and higher education.

**Table 1:** Ranking of countries in the world according to the education level index United Nations Development

Programme: Education Index 2024 [5]

Programme: Education Index 2024 [5].				
Nº	Country	Expected duration of study (in years)	Average duration of study (in years)	Education Index
1	Australia	21.1	12.7	1.01
2	New Zealand	20.3	12.9	0.99
3	Iceland	19.2	13.8	0.99
4	Sweden	19.4	12.6	0.96
5	Belgium	19.6	12.4	0.96
11	Germany	17.0	14.1	0.94
17	United States of America	16.3	13.7	0.91
29	Russia	15.8	12.8	0.85
33	Georgia	15.6	12.8	0.89
36	Kazakhstan	15.8	12.3	0.82
47	Belarus	15.2	12.1	0.8
58	Ukraine	15.0	11.1	0.74
76	Kyrgyzstan	13.2	11.4	0.76
77	Turkmenistan	13.2	11.3	0.74
80	Uzbekistan	12.5	11.9	0.73
101	Tajikistan	11.7	11.3	0.68
188	Burkina Faso	9.1	2.1	0.3
191	Niger	7.0	2.1	0.24

The table's figures show that Australia is ahead of New Zealand in this ranking, taking 1st place. In this top five, New Zealand shares the same education index with Iceland - 0.99. Norway is in the second five in this list, although it was in the first in the previous calculation. Germany also lost its leading position (2020), falling to the eleventh position with an index of 0.94, and the United States of America shared this group with it with an index of 0.91.

Among the CIS countries, Russia, ahead of Kazakhstan by 3 positions, is among the third ten countries in the world, ranking 33rd with an index of 0.85, therefore, Kazakhstan is awarded a relatively decreasing index of 0.82.

Belarus ranks in the fourth ten in this ranking, although it was in the thirtieth place (rating for 2020).

Uzbekistan and Tajikistan are gaining a downward trend, as they complete the first half of the list with an education level index of 0.73 and 0.68. Countries such as Mozambique, Ethiopia, Chad, Burkina Faso and Niger occupy the last places from 165 to 191 with indices 0.3 - 0.24 in the list of countries in the world by level of education [9].

In the world of innovative, during the process of changing the structure on employment and increasing the share of intellectual labor, the share of low-skilled labor is simultaneously decreasing. It is the level and quality of education that is one of these sources of human capital.

Innovative education is the intellectual values of a person, the acquisition of skills and abilities aimed at creating socially significant values, and its purpose is to inherit intelligence and the ability for implementation in creative work.

Hence, it follows that the key factors determining the intellectual potential of an individual in any state of the world include the following:

- Political development;
- Economic development;
- Social development;
- The content and quality of education.

If we take into account the conditions of the information age, then the main activity in the field of education will take place under the following mottos as its role and functional structure.

The functional structure is based on levels that meet the requirements of the current society, quality and internationalization - local, national and international.

In human (person), the experience of one individual does not disappear after its death, but accumulates in society due to the developed mind of people and their ability to communicate.

In modern conditions, market institutional transformations have a very significant impact on the standard of living of the population and the development of human capital.

As noted above, the innovative education occupies an important place among the new society and it belongs to strategically important areas of activity that could determine the human capital quality. Based on this, the following measures should be taken in this direction:

- to increase the professional competence of teachers, both in higher and secondary educational institutions through professional development systems every three years at the expense of centralized state budget funds;
- to ensure the flexibility of the vocational education's structure to changes in the labor market;
- to organize close relations between the branches of the national economy and the higher education system for the effective use of labor resources;
- to strengthen the target orientation towards the system of training specialists for the needs of the national economy of the country;
- to provide targeted social support to the population's low-income segments in terms of obtaining professional higher education;
- to transfer priority to the public sector for social support of the population, it is necessary, in the issue of the secondary education development;
  - to ensure the adaptation of the education system to market conditions.

In general, the recommended directions for improving the branches of the social sphere in the scientific and methodological aspects, although is not a complete system of measures, will make a significant contribution to improving the country's population standard of living for the near future.

The education system, like the rest of the systems that make up the social sphere, depends entirely on the support from the state.

Education reform should take into account the interests of every economic agent. However, the responsibility in this area is too high, because it determines the future of a person.

In order to increase the accessibility of higher education and respect the principle of fairness and transparency in university admissions, the Government has created a Unified State Exam for the younger generation from low-income families, which has become the main link in the national knowledge assessment system.

However, as practice shows, despite efforts aimed at creating conditions on the part of the Government for the education of a growing number of school-age children, the quality of education of the young population has decreased according to the test results. Creating conditions for the education system is becoming a difficult task that affects the economy as a whole. The acute shortage of qualified pedagogues is associated with the outflow of personnel from the education system for economic reasons, due to unworthy wages, having a serious impact on all levels of the education system - from preschool to higher education.

Today, it is necessary to support the low-paying population with budgetary higher education by financing.

Consequently, in 2024, the state provided more funds for the development of the education sector, as budget expenditures increased to 575.2 billion rubles in accordance with the state program "Development of Education".



Figure 1: State budget expenditures on Education in Russian Federation, in bln. ₱ from 2000 to 2023

At the same time, the indicators of the draft federal budget for this state program compared with the current Federal Law for 2023-2025 in 2024 [2] which increased by 19.9 billion rubles, in 2025 – by 21.7 billion rubles, therefore in 2026 – by 14.6 billion rubles. It should be emphasized that the amount of funds for the implementation of the national project "Education" in 2024 has not decreased and corresponds to previously accepted parameters. In 2025 and 2026, it increased by 2.7 and 2.3 billion rubles, respectively.

One point one billion rubles are additionally provided for the implementation of secondary vocational education (SVE) programs in 2024, 4.2 billion rubles in 2025, and 4.1 billion rubles in 2026 (Figure 1).

We believe that in this context, the State should ensure general access to education through the implementation of the following programs:

- public support for students from low-income families, orphans and gifted children;
- development of a long term lending system;
- ensuring the flexibility of the structure of vocational education to changes in the labor market;
- organization of close relations between the branches of the national economy and the higher education system.

The analysis of these trends in the changing role of knowledge and education in socioeconomic development allows us to conclude that the fundamental change in the function of the social institution of education in the material and spiritual reproduction of the living conditions of society and man. In the context of the growth of scientific, intellectual, educational capacity and high rates of change in the world, innovative education becomes the basis for the successful functioning of the economy and all processes of reproduction of society.

In summary, in our view, the recommended directions can make a certain contribution for improving the country's population standard of living in nearest future.

## References

- [1] Atokhodzhaeva M.A. Assessment and mechanisms for regulating the standard of living in the economy of Tajikistan: Monograph, Moscow: CENTER for TRANSPORT, 2019, pp.54-58 ISBN 978-5-9903808-7-5.
- [2] Education in numbers: 2023: a short statistical collection / T.A. Varlamov, L.M. Gokhberg, O.K. Ozerov; Nat. research. Higher School of Economics University Moscow: ISIEZ HSE, 2023. 132 p. 350 copies. ISBN 978-5-7598-3004-7 (in the region)
- [3] Federal program "Development of a unified educational information environment for 2001-05" (project) Public education, 2001, No. 1.
- [4] Flier A.Ya. Cultural studies for cultural scientists: a textbook for undergraduates and postgraduates, doctoral students and applicants, as well as teachers of cultural studies. M.: Academic project, 2000. p. 496
- [5] Ranking of world countries by level of education information about the study [Electronic resource]: Center for Humanitarian Technologies (last edition: 2024 25.08). Access mode: http://gtmarket.ru/ratings/education-index/education-index-info [Date of access: 09/10/2024]
- [6] Trends in Education Access and Financing during the Transition in Central and Eastern Europe World Bank Technical Paper N 371. Washington, 1997
- [7] United Nations Development Programme. Human Development Index (HDI): Education Index [URL: hdr.undp.org]./ United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute for Statistics. Data Centre [URL: data.uis.unesco.org]. /United Nations Statistics Division. UNdata [URL: data.un.org]. [Date of access: 18/09/2024]
- [8] Global Market Intelligence. URL: https://www.holoniq.com/notes/global-education-technology-market-to-reach-404b-by-2025/ (дата обращения: 27.09.2024).
  - [9] http://gtmarket.ru/ratings/education-index/education-index-info