



## LAWS OF CYBERNETIC DEVELOPMENT OF EDUCATION AND SCIENTIFIC TECHNOLOGY IN THE INFORMATION SOCIETY

Kambarova Dilorom Yusupovna

Associate Professor of Fergana State University

<https://doi.org/10.5281/zenodo.11170105>

**Abstract:** As a positive result of modern globalization and informatization processes, the place of each country is determined by the level of development of science on the world scale. As a result, the importance of the role of education in the development of society has changed. At a new stage of development, education is performing qualitatively new functions. Education, in the era of modern globalization, knowledge is the main means of production. This makes it possible to start a new stage of development in the history of mankind. Uzbekistan, in its new stage of development, is showing its support for the reform of the education system and its efforts to train a generation of talented and creative personnel through educational development.

**Key words:** information society, innovative education, information technology, classical rationalism, synergetic approach

The method of acquiring knowledge in an innovative direction in the information society is based on the effective use of the possibilities of the new generation of information technology. Education during this period was based on classical rationalism, and knowledge and problem solving methods were directly transmitted during the educational process. The transition from the study of complex systems to the study of self-organizing, self-developing nature has led to a radical transformation of mechanistic ideas about the closedness of systems. So, in the new era, getting education and increasing knowledge will become more complicated.

In the information society, the laws of cybernetic development of education and scientific technology are being transformed. Because such a way of thinking recognizes that instability and chaotic conditions in the system are against national interests. However, knowledge is a product of scientific creation, which embodies both rational and irrational states. The predominance of linear thinking in education is no longer consistent with the foundations of post-classical science. As a result, the process of knowledge transfer, the efficiency of knowledge generation, and the creativity of knowledge subjects decreased. This development is considered as a "crisis of education". In this sense, experts paid attention to the role of social modernization of the educational system in social development and evaluated education as an axiological value. The universal historical law of any social development is inextricably linked with the intellect. Therefore, fundamentalization, neospherization, humanization, creativity, intellectualization, informatization, integration of educational and research processes have taken a leading place in modern education.

The complexity of modern social changes requires a synergistic approach to education as well. Because the modern educational paradigm recognizes the need to move from the study of closed systems to the study of evolutionary open systems. Teaching in the synergistic approach is based on the relationship between the student and the teacher - not the direct

transfer of knowledge, but an open dialog in the transfer of knowledge, a collaborative learning space. The open education system is aimed at educating a flexible, active, creative person through continuous, innovative, distance learning. This knowledge is subjective, its dialectic to new knowledge directs the formation of personal abilities. This process awakens the student's hidden abilities and allows him to express himself creatively. The educational aspect of development gives a new meaning to knowledge and promotes the educational process towards non-linear thinking due to the formation of creative abilities and skills. Non-linear thinking recognizes that the nature of the system cannot be reflected in single laws in the multivariate development of cognition. Non-linear thinking, the idea of multiple options and alternatives of progressive (evolutionary) directions and the choice of one of these alternatives, the rate of development (level) of processes in the environment, creates the educational evolution of social development. As a result, the principles of thinking recognize the multivariate nature of educational development and put an end to one-sidedness and inertia of the thinking process. In the process of cognition, "subject-subject" relations imply unstable, chaotic conditions of the cognitive process. In this case, the creative activity of a person ensures the efficiency of knowledge generation.

As it is known from the experience of developed countries, the commercialization and globalization of education occurs due to the interaction of market relations and property status in the transformation processes of education in the development criteria of society. We are referring to online education competition from the US, France, Germany and China. At the same time, five hundred thousand people a year are becoming holders of diplomas around the world, even without stepping on the threshold of the University of Delhi in India. Therefore, online education becomes an important production criterion of social development and acquires an important importance in the study of Uzbekistan's influence in the world community.

Due to the continuous renewal and transformation processes in the education system of the society, in forecasting the results of the new stage of development of Uzbekistan, "...it is important to understand that information - information or knowledge is of great importance". Because scientists pay attention to the scientific-methodological analysis of the social value of knowledge and information in the renewal of society. For example, Toffler in his works "Third Wave" and "Revolutionary Wealth" admits that at all stages of social development, humanity is moving from relying on scientific knowledge to a high-tech intellectual "wealth creation" system.

A new stage of development leads to the emergence and rapid development of new social groups that are significantly different from traditional social groups. The formation of the middle class, such as entrepreneurs, managers, engineers, technical specialists, officers, servants, lawyers, teachers of higher educational institutions, has acquired a large social structure. Potentially oppositional intellectuals occupy an important place in the structure of the middle class<sup>2</sup>. It is intellectuals who understand new political and economic ideas early and help them to become a material force and spread. As a result of this, people and social groups, who were previously excluded from social life and did not show any interest in politics, change their views.

It is known that it is given based on the demand of the laws of the market economy with the beneficiaries interested in the development of the education system. Modernization in Uzbekistan should ultimately create favorable conditions for postindustrialization (that is,

postmodernization). Otherwise, it will lose its meaning, because the problems facing Uzbekistan today may become more complicated.

It takes a certain amount of time to direct education in Uzbekistan to work based on the laws of the market economy. It implies the work of at least two or three generations. In order to solve the task of sustainable development, it is necessary to strengthen the achievements in the field of high technologies. By the current period of Uzbekistan's development, the scientific-theoretical and practical foundations of building a democratic state and civil society based on market relations have been created.

Conceptual approaches to this problem were expressed in the Decree "On the strategy of actions for the further development of the democratic development and education system of the Republic of Uzbekistan" in our country. At the same time, according to the "Development and education" according to the UN, it shows its essence in the foundations of the state policy on youth of the government of Uzbekistan. This ensures the need to apply market laws to life and education, relying on the generally recognized principles of civil society.

The President of Uzbekistan, Shavkat Mirziyoyev, in his speech at the ceremony on the occasion of the Youth Day, said that the "Youth social development and education" program was the foundation of the scientific world civilization of Abu Nasr Farabi, Abu Rayhan Beruni, Abu Ali Ibn Sina, modern science, scientific intellectual potential of young people in the intense era. determined the tasks of further strengthening the organic connection between science and production. The head of our state expressed confidence that support of talented young people in social development, proper organization of education and qualified specialists will develop our country.

In conclusion, in the new stage of development of the society, modern information technologies penetrate into all aspects of social life and occupy the minds and consciousness of young people. In the current era, the task of educating a highly spiritual person is entrusted to the education and training systems. Training of highly qualified, competitive personnel in accordance with world standards and requirements is considered an important social task.

This situation should serve the noble tasks of young people to become a mature person at the level of the requirements of modern scientific development. In this sense, we draw attention to the fact that certain educational programs and concepts are directly related to the requirements of modern development. In this sense, the main goal of the problem of social development and education is to keep young people in step with the times, the education of thinking capable of overcoming the problems and obstacles is gaining importance. In this education, it is important for the society that the youth realizes the need to be enlightened by adapting quickly to the complexities of the changing world.

Social progress is progress, the change of a positive society from one quality state to another higher quality stage, perfection and adulthood.

In the development of the society, the production of gross product, its measurements in relation to the capita, at the same time, the indices of the standard of living of the international organizations were accepted.

The Strategy of Actions of Uzbekistan envisages the assimilation of the achievements of modern civilization by modernizing all spheres of social life in the spirit of nationalism according to the criteria of universal development. Because the destructive effect of the achievements of modern social development on national-cultural traditions and values is

observed, and its consequences leave their traces in the consciousness of young people. The consumer society enables the transition to the innovative stage with the rise of moral and moral culture of young people..

### References:

1. Хакен Г. Информация и самоорганизация: макроскопический подход к сложным системам. – Москва.: 1991. –С.145.
- 2.Чернозуб С. П. Концепт национальной науки в новом дискурсе цивилизаций // Историческая психология и социология истории, – 2012, – Т.5, – №1,– С. 43 – 61.
3. Фукуяма Ф. «Великий разрыв» – Москва.: ООО. АСТ. 2003. – С.19.
4. Мухамедова З. М, Парадигма гуманизации образования – Ташкент.: Фан. 2004. –С.132.
5. Князева Е.Н. Одиссея научного разума. Синергетическое видение научного прогресса. – Москва.: Наука, 1995. –С. 238.
6. Гидденс Э. Социология.Тошкент.: Шарқ 2002. –Б.744.
7. Тоффлер Э. Тоффлер Х. Революционное богатство. – Москва.: 2007. – С.388.
8. Decree of the President of the Republic of Uzbekistan on the State Program for the implementation of the Strategy of Actions on the five priority directions of the development of the Republic of Uzbekistan in 2017-2021 in the "Year of supporting active entrepreneurship, innovative ideas and technologies" // People's word, - 2018. - January 23.
9. Mirziyoev Sh. M. Together with our determined young people, we will build a new Uzbekistan // New Uzbekistan. - 2021. - July 1