



Education System-As A Factor in Ensuring the Quality of the Educational Process

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Article History	Abstract
Received: 06 June 2023 Revised: 05 Sept 2023 Accepted: 30 Nov 2023	<i>The basis for the ever-accelerating development of world civilization and innovation is today realized by the heuristic capabilities of the modern educational system. After all, the development index of the countries of the world shows that the development of all spheres is associated with the educational process. In particular, the modern educational system is manifested as such a process in which there is a change and stagnation, development or lag, progress or decline. This opens up new opportunities for the dynamics of the formation and development of modern education. At this point, the definition of synergistic laws of the modern educational process as a complex and open system is rising to the current position as one of the requirements of today.</i>
CC License CC-BY-NC-SA 4.0	Keywords: Modern Education, Process As A Complex, System Is Rising To The Current Position

1. Introduction

Although educational epistemological, theoretical-methodological, analytical, synthetic analysis in World Science was carried out by many representatives of the field, including educators, psychologists, sociologists, philosophers, economists, it remains known that research on its synergistic laws, issues of self-organization in the educational process, the essence of the educational attractor, constructive aspects of the exchange of order and chaos in education is not enough. In this regard, at a time when various universal problems pose a threat to national and international security, the improvement and reform of the national education system, which can serve as the basis for a new stage of development, direct people to goodness, systematic research of educational problems on the basis of a nonlinear approach, the formation of ideological immunity are becoming important practical. In this sense, the need for a comprehensive in-depth study of the national roots of spiritual and moral education, its synergistic analysis from the point of view of the idea of a modern and national education system, the widespread establishment of research work in this area remains.

Synergistic methodology has attracted the attention of researchers since the 70s of the XX century. In this sense, scientists who have carried out scientific research related to this research work can be divided into three groups:

First group. This group can include foreign scientists who have conducted research directly related to synergetics and education. G from foreign scientists in covering the possibilities of synergistic methodology. Haken, I. Prigogine, I. Stengers, L. Bertalanffy are noteworthy. Also K.M. Matthews, M.S. White and R.G. Long on the possibilities of using synergetics in the field of social knowledge, J.L. Johnson and B.K. Burton, on the other hand, recommended the application of the theory of disorder to socio-economic processes. The scope of foreign scientific research within synergetics is very wide. We focused mainly on studies carried out within the framework of educational and synergistic methodology.

Second group. The issue of a synergistic approach to the educational process in the CIS M.A. Danilov, L. Ya. Zarina, E.G. Pugacheva, V.G. Vinenka, V.V. Vasilkova, V.P. Bransky, Z.J. Janabaev, N.D. Observed in Xmel studies. Knyazeva and Kurdyumov reflect on the

synergistic approach to the educational process, promoting the need for synergistic analysis of the educational and educational system, providing synergistic knowledge to students and students. V.G.Budanov, proposing the effective use of the principles of synergistic methodology in education and science, pays great attention to the problems of synergistic modeling in the humanitarian sphere, its stages and connection with Applied Philosophy. V.F.Gorbatyuk, thinking about the synergistic principles of Education, considers some models of intelligence and the theory of a large number of minds. V.I.Lebedev provides opportunities for the use of synergistic principles in economics, sociology and humanities. A.G.In his research, madzhuga reveals the principles of synergistic education, analyzes the concepts of synergistic culture, pedagogical senergetics. B.A.Mukushev tries to prove that the application of ideas of synergistic methodology in the educational system occupies an important place in the design of the content of science as an educational material necessary for the formation of ideological, methodological and synergistic knowledge and skills, in the modernization of education, in the implementation of ideas of integration, in the formation of a pedagogical tool for Personality Development

Third group. Researchers and scientists of our country are engaged in scientific research on the theoretical and methodological problems of synergetics. Including A.F.Feyzullaev, M.N.Abdullaeva, B.R.Karimov, B.O.Turaev, G.N.Nazarov, N.A.Shermukhammedova, Sh.S.Koshakov, Z.R.Kadyrova, G.G'.Gaffarova, M.Q.Niyazimbetov, D.M.Bazarov, G.S.Sultanova conducted effective research on this. An important scientific significance is the research carried out by kofidikov on the basics and prospects of pedagogical synergetics, a synergistic approach to the management of the educational system. Also, several studies have been carried out in our country that summarize educational and philosophical disciplines. In Particular, K.J.Tulenova on issues of educational and innovative thinking, R.J.Ishmuhamedov and M.A.Yuldashevs on improving innovative, pedagogical, philosophical thinking in education and education, N.N.Azizkhojaeva on the issues of training teaching specialists, F.A.Babashev on information policy in the system of Higher Education, N.Shermuhamedova and R.Khudoyberganov on the issue of educational problems and philosophical analysis of Education, R.D.Yuldashev presents the problems of education, the role and importance of philosophical knowledge in the educational process, he carried out important studies that revealed the ontological and epistemological essence of the philosophy of education, as well as issues of the formation of an innovative personality in education.

The studies listed above do not reveal the synergistic laws of Education. Based on this, in this research work, the synergistic laws and their capabilities in educational development, as well as the categories of synergistic methodology, features of the manifestation in the educational process are studied theoretically and methodologically.

We believe that the synergistic education system is of urgent importance in improving the quality and effectiveness of education, while ensuring the diversity of the educational process. Chapter 2 of the law of the Republic of Uzbekistan "on education" is called "education system, types and forms", according to Article 6 of this chapter, the education system covers the following part (item:

"- state educational standards, state educational requirements, curricula and curricula;

educational organizations implementing state educational standards, state educational requirements and educational programs;

organizations that carry out an assessment of the quality of Education;

scientific and pedagogical institutions carrying out research work necessary to ensure the functioning and development of the educational system;

includes public administration bodies in the field of education, as well as organizations under their jurisdiction".

Education is a continuous process. The educational system is an integral complex system, consisting of the sum of several parts (elements), interconnected and complementary, in which the function of each part in this system is important for the implementation of the function of an entire system.

The principles of the synergistic methodology play an important role in the development of methods for understanding and developing the individual abilities and creative activity of the educational person in the educational process. "Synergistic or self-organization theory seems to be one of the most popular and promising interdisciplinary approaches today." It is worth noting that each methodological approach is considered important for its time and can change over time. As progress continues, there will be no absolute, stagnant, constant methodological views either. From the point of view of the

period, it continues to improve and change. Based on the demand of the current period, we tried to reveal the synergistic methodology and the synthesis of the educational system in our research work.

The educational process is made up of a set of parts that develop in collaboration, moving together and carrying out activities for the success of a single system, for its integrity. Today, the development of the necessary reforms for the rational implementation of the function of each part that makes up the educational process plays an important role in the formation of a synergistic educational system.

What is a synergistic education system?

It seems to us that the synergistic education system is an open, unbalanced, nonlinear system that develops on the basis of the coordinated activity of several fragments (parts) in the educational system, has a proliferative property, that is, new elements are formed in the system, capable of self – organization.

The formation of a synergistic education system plays an important role in offering several solutions to one problem in the system, indicating the possibility of choice in the presence of several methods and ways.

Especially today, the formation of a synergistic education system, in which much attention is paid to educational reforms in our country, brings a fundamental turn to the educational process and has great potential in adapting traditional educational models to modern educational models, in creating the most optimal system of Education.

B.A.Mukhushev, reflecting on the topic of synergetics in the educational system, emphasizes: the survival and further development of modern higher and secondary education depends on the growth of the teacher's professional qualifications in psychological, pedagogical and methodological terms. From the point of view of synergetics, the active principle in the pedagogical system is the "teacher – student" principle. Special subsystems form the hierarchy of the pedagogical system. All of the above conditions should be inherent in these subsystems - openness, free exchange of information, dialogism, freedom of self-expression, the ability of the team to self-control, etc." In our opinion, the active principle in the pedagogical system is the principle of "teacher – student – environment". This principle is the "system of synergetics of Education". Modern educational model to the environment (balloon process), armament with IT Technologies, Information System, etc. they can be entered. Hence, without an environment (including without an information field), the teacher – student himself cannot be a synergistic system. In the process of modern education, through the formation of a modern environment and a synergistic education system, the main attention is paid to the comprehensive development of the personality of the student and teacher who are at the center of Education.

In synergistic education, one can say that openness is the main condition for development. That is, it is said in the sense that it is open to innovation, reform, innovation.

Through the formation of a synergistic education system in the modern educational process, the main attention is paid to the comprehensive creative development of the personality of the student and the student who are at the center of Education. Through unconventional teaching methods, the student's free thinking, creative abilities, finding his place in the team, self- assessment, control, constant work on himself are formed. Education is such a complex synergistic system in which one cannot introduce a single strict method or technology. The reason is, education is a process in which different people, based on different age indicators, develop with different levels of psychological acceptance. It should be approached at each educational stage, within the framework of each discipline, even from the individual state of each educational institution, as a result of which efficiency is achieved. For example, focusing on the Chinese educational system, from the stage of preschool education, a separate agenda is developed for each educator. As we know, each person's personality has its own, individual, unrepeatable individual integrity, the degree of its knowledge and acceptance also acquires a unique, unrepeatable essence. Therefore, we believe that efficiency can be achieved if individual qualities and characteristics, specific abilities and levels of each individual are taken into account in the educational process.

Today it is quite natural that specialized schools, presidential schools established in our republic, consist precisely of small groups of a small number (12 people), give the opportunity to work with each educational person. Reforms like this are just an example of a synergistic education system.

Education as a dynamic system in its essence evolves under the influence of many opposing thoughts, views, ideas. A.As Pugacheva noted, " on the one hand, there is a mechanism of succession in education, imbued with the spirit of centuries-old traditions, and on the other hand, it must follow the rhythm of

the changes taking place in the surrounding world. On the one hand, there is a strictly systematic (deterministic) system, and on the other hand, there are many attempts to implement educational reforms." Therefore, when carrying out reforms in modern education, it is necessary to take into account traditionalism. A complete update may not be effective enough. Because in the educational system, the adoption of each incoming innovation is a complex process and takes a certain amount of time. An effective result can be achieved if modern reforms in education are introduced in harmony with traditionalism. For example, in the process of a particular lesson in education, there are also such subject topics that traditional methods can be more effective in explaining them than non-traditional educational technologies. Especially in theoretical subjects, lecture teachers in many cases prefer traditionalism so that the students of the lecture classes have a deep understanding. One of the methods also recognized in the educational system of developed countries in the world is "Blended learning" ("mixed learning" methodology)• promotes the combination of modernity and traditionalism in education and its effectiveness.

In our opinion, it is in this order that the implementation of today's educational reforms should be approached, in which centuries-old traditionalism will also penetrate into modernity in terms of dialectical denial without denying it. In this process, modern educational reforms are harmonized with National Education. In this case, the specific lifestyle, material and spiritual potential, mentalitet and intellectual level of each people should be taken into account. The result of this complex process may not be manifested at once, but may appear years later. That is why we can say that education is a complex, hierarchical, dynamic, nonlinear, unbalanced synergistic system.

The formation of a synergistic education system can manifest itself in the following situations:

First of all, in the interaction of the subjects of the educational process; in this case, an atmosphere of reasonable cooperation between the educational provider, the educational recipient and the interested parties (parents, the state and the government) should be formed in the real sense.

There is a mutual exchange of matter, energy and information between the system and the external environment; in this case, the educational system, as a constantly open system, adopts various innovations from the external environment, and presents to the external environment ideas and theories formed on the basis of a new approach.

Each part that makes up the system acts together for the integrity of the system; that is, from the bottom up that makes up the educational system, each part activity is responsible for the effective result of an entire educational system.

In the system, various ways of development are constantly considered, there is a choice, the most optimal options are selected; in this, the possibilities of divergent thinking are effectively used.

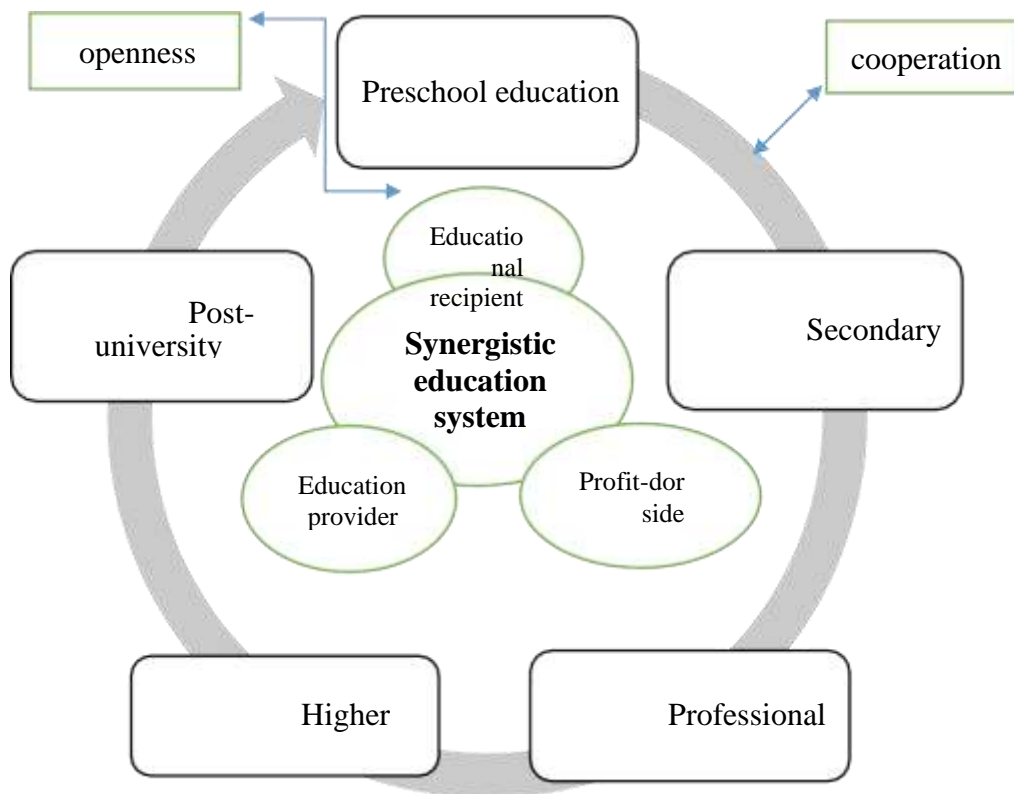
When reforms are applied, an atmosphere of healthy competition is formed between order and disorder, and the function of the attractor factor (promising educational system, skilled educators, modern, able-to-compete educational institutions)is relied on in order to come to a reasonable solution;

The process of self-organization is manifested in the system;

The educational process develops as a complex system in a state prone to nonlinear, chaotic fluctuations;

The reform carried out today or the knowledge given will form the basis for forecasting tomorrow.

1-table Scheme for the formation of a synergistic education system.



In our opinion, the introduction of a synergistic educational system into the educational process leads to the following result and efficiency:

It leads to the formation of a synergistic way of thinking in the educational and educational environment, that is, from linear thinking to a nonlinear way of thinking;

Encourages you to look for multi-option solutions to problems in the learning process; Forms a new synergistic view of the environment, the universe;

Leads to the fact that each educational person is treated as the owner of a separate intellect in relation to the teacher.;

Constantly enriches the content of education with innovations / [url](#)>;

Forms the natural acceptance of the implementation of any educational reform, which is carried out in the form of;

Encourages the subjects of the educational process to constantly work on themselves and plays an important role in self-organization;

Develops theoretical and practical recommendations that can contribute to the adoption of modern educational technologies, methods and means of innovation on the basis of a quick, logically accessible approach.

Education is a complex synergistic system that is self-organizing, consisting of a large number of elements. It is open and unbalanced. Instability can be observed in education, and reforms are carried out to achieve a certain stability. Instability at a certain time in education becomes the basis for the formation of a qualitatively new stage in the system. That is, the unstable state in the educational system is not, in our opinion, the crisis of education, but the beginning of the path from one state to a new one. For example, in the conditions of a pandemic that has brought humanity all over the world against a new problem, several platforms of "online education" were formed, and another platform was recommended before both educators and educators could master one. The tools for organizing online classes" Moddle", "Hemis", "Google claasroom", "Zoom", "Google meet", etc., in our opinion, at the initial stage led to a certain level of instability in an entire educational system. But the educational process did not stop, but, on the contrary, improved from such problems in a more recent way, on the basis of New-new ideas.

It is natural that synergistic laws apply in the educational process, only to this day this process has not been recognized as the validity of synergistic laws. To date, we believe that the formation of a synergistic education system, based on the need to widely use the capabilities of the synergistic methodology, also plays an important role in the quality control of the educational process.

So, as we have seen, it is important to evaluate the quality of education, to introduce a synergistic education system in increasing the effectiveness of the educational process.

"The synergistic education system covers the following issues:

- synergistic thinking;
- synergistic study;
- synergistic understanding and explanation;
- formation of synergistic educational concepts;
- formation of a synergistic way of thinking;
- teaching to find a synergistic solution to a problem;
- clarify the goals and objectives of synergistic education;
- the practical use of synergistic laws of Education".

Synergistic thinking is to allow freedom of thought. Synergistic thinking means not setting boundaries in relation to the thinking object, thinking as independently as desired and coming to several conclusions. Especially representatives of scientific creativity, art, literature can achieve tremendous success through synergistic thinking. When synergistic thinking is carried out, the problem is internalized and imagination and a free approach are allowed as desired.

In synergistic learning, the subject or object being studied is viewed from different angles, based on different approaches. For example, in the synergistic study of the modern educational system, it is allowed to refer to it (the educational system) not only from a pedagogic or psychological (one-sided) point of view, but also from a philosophical, historical, political, national, religious and hok. it is considered as an object of (multilateral) investigation of industries. After all, each of these areas and areas can conduct a different study of the educational system based on its approach.

Synergistic understanding and explanation can be used as an example of understanding and explanation through unconventional techniques in the learning process. Because interactive techniques serve to make both the educator and the educational person constantly work on themselves, quickly come to certain conclusions in the solution of any problems, to form the ability to make several proposals for the solution of problems.

"For the successful implementation of the ideas of synergetics in education, it is necessary to form a system of knowledge from the theory of self-organization in students, phenomena and concepts in the educational material have a synergistic composition." Also, the modern educational process requires the formation of an educational and educational environment that can absorb the ideas of self-organization in this dynamically developing, nonlinear system. Although it is impossible not to recognize the strong influence of education in the process of self-organization. Also, " ideas of self-organization can be embodied in school Natural Science courses and, with caution, in the humanities, for example, in an integrated course for the upper classes. At the same time, it is not necessary to include separate topics in the theory of self-organization. In most cases, when explaining the programming issues of classical science, it is preferable to focus on the substitution of attention," while in synergistic methodology, methodological issues of postnocratic science are solved heuristically.

4. Conclusion

The conclusion was made on the research work:

First, education is a synergistic system. The educational system can be the object of study of the synergistic methodology as an open, unbalanced, with internal and external vibrations, nonlinear, chaotic, self-organizing, dissipative system.

Secondly, synergistic laws (openness, helplessness, imbalance, order and disorder, self- organization) apply in the educational system. The study of today's modern education as a synergistic system, its analysis through synergistic methods, plays an important role in the solution of many problems in education.

Thirdly, today the formation of the modern educational process on the basis of synergistic laws is a requirement of the period, which can become the basis for the transition to a new stage in the educational system. The introduction of a synergistic education system is effective in offering several solutions to many problems in education.

Fourth, the formation of a synergistic education system serves to approach the educational process using new methods of quality control and increasing its effectiveness. The synergistic education system leads to the formation of a new worldview, to the decision of a logical, critical, synergistic way of thinking.

Fifth, through the synergistic education system, modern personnel are formed that are able to self-organize, work tirelessly on themselves, give an adequate assessment of their labor, are demanding on themselves.

References:

- [1].Mukushev B.A. Synergetics in the education system. // Education and Science. -2008. - No. 3. - p. 117.
- [2].Zorina L. Ya. Reflection of the ideas of self-organization in the content of education.// Pedagogy. - 1996. – No. 4. – pp. 105-109.
- [3].Ergasheva M. X. MODERN EDUCATION AS A SYNERGISTIC SYSTEM//PHYLOSOPHY I JIZN MEZHDUNARODNY MAGAZINE. – 2022. – №. SI-1.
- [4].Proliferation-branching from one vein, branching. The concept of proliferation was first introduced in philosophy by the American philosopher Feyerabend.
- [5].Mukushev B.A. Synergetics in the education system. Education and science. 2008. No. 3. - p. 111.
- [6].Ergasheva M. K. Synergistic analysis of education // Science, education, theory, practice: new approaches and current research. - 2021. – pp. 44-46.
- [7]. Prigozhin I., Stengers I. Time. Chaos. Quantum. To solve the paradox of time. – Moscow.: Progress, 2003. – p. 240.
- [8].Mathews K.M., White M.C., Long R.G. Why study the complexity sciences in the social sciences // Human relations, 1999, 52 (4).<https://link.springer.com/article/10.1023/A:1016957424329>.
- [9].Johnson J.L., Burton B.K. Chaos and complexity theory for management: Caveat emptor // Journal of Management Inquiry. 1994. vol 37. - №1. - P.320.
- [10].Danilov M. A. Pedagogical process as an object of pedagogical theory. / Collection of scientific tr. Questions of education and upbringing. Comp. and ed. by E.G.Kostyashkin. – Moscow.: 1972. –P.362; Danilov Yu. A. The role and place of synergetics in modern science / Ontology and epistemology of synergetics. — Moscow.: RAS Institute of Philosophy. 1997. - pp. 5-11.
- [11]. Zorina L. Ya. Didactic foundations of the formation of systematic knowledge of high school students. – Moscow.: Pedagogy, 1980. – p. 128; Zorina L. Ya. Reflection of the ideas of self-organization in the content of education // Pedagogy. - 1996. – No. 4.– pp.105–109.