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METHODOLOGICAL JOURNAL****MENTAL ENLIGHTENMENT SCIENTIFIC –  
METHODOLOGICAL JOURNAL**<http://mentaljournal-jspu.uz/index.php/mesmj/index>**CHARACTERISTICS OF ADAPTIVE CONTROL OF PEDAGOGICAL  
SYSTEMS****Akbar S. Djurayev***PhD, Associate Professor**The main scientific and methodical center**Uzbekistan***ABOUT ARTICLE**

**Key words:** adaptation / adaptive environment / adaptive management / technology of adaptive management of the educational process.

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**Abstract:** This article provides a scientific, theoretical and practical description of the unique content of the adaptive technology for managing the educational process of the higher education system. It has been scientifically proven that flexible management allows developing humanistic views designed to optimize the interaction between the student's personality and modern society.

**INTRODUCTION**

In the developed countries of the world, the strategic goal of the modern state education policy aimed at increasing the quality of higher education is related to the improvement of the organizational and pedagogical system of flexible management of the innovative development of the higher education system, which requires a radical change in the methodology and technology of the educational process in an innovative mode, specific conditions for its radical renewal. requires creation. The system of flexible management of the innovative development of the same higher education system takes priority in increasing the social and professional mobility of graduates. In the long-term socio-economic development strategy of the Republic of Uzbekistan until 2035, the design of the educational process of the higher education system based on the effective use of intellectual and material and technical resources is becoming increasingly important.

It is also important to adapt to the conditions of the internal environment determined by the interaction of the subjects of the pedagogical process in creating a flexible educational environment. Since the category of "relationship" is considered as the connection of the subject with other subjects and objects of the surrounding world, which is established by himself and manifests itself in three forms - behavior, rational judgments and emotions, the environment of adaptation must "adapt".

However, adapting to the conditions of the internal environment, including taking into account the possibilities, needs and interests of the participants of the pedagogical process, is a necessary but not sufficient sign of adaptation. The most important condition for a person's successful adaptation is an optimal combination of flexible and adaptive activities, which vary depending on their specific characteristics.

A flexible system is a system that has the ability to adapt. Accordingly, an adaptive educational environment is a socio-pedagogical system that adapts to the changing conditions of the external environment, on the one hand, tries to adapt to the person with individual characteristics as much as possible, on the other hand. Adaptable pedagogical system is a socially conditional unity of the participants of the pedagogical process, which interacts on the basis of cooperation between themselves, the environment and its spiritual and material values aimed at the preservation and development of the individual.

The existence of a flexible pedagogical system in the educational institution allows: quick and flexible reaction to the changing socio-pedagogical situation; "filling the missing links" of the educational process; the choice of management and didactic models that will give a real positive result in the realization of all "I" by the participants of the pedagogical process, from self-awareness to self-realization; organizing and correcting the pedagogical process in such a way as to minimize overload, prevent neurosis, ensure timely diagnosis, systematic psychological and psychotherapeutic support for the participants of the pedagogical process; overcoming the barrier between academic, bookish, oral knowledge and sensory-object acquisition of the world; adaptation to individual characteristics based on the mechanism of self-management of a person; to be fundamentally open, to increase the reserve of readiness for changes, to gradually acquire new levels of freedom in solving problems related to human development; when you solve some problems, go to the next one, ie. to be in constant development and improvement according to the rapidly changing requirements of the surrounding reality. In this regard, in the "Strategy of Actions" for the further development of the Republic of Uzbekistan in 2017-2021, the state will improve the policy of working with youth, educate the intellectually developed young generation as a well-rounded person, align the quality of education and its evaluation criteria in educational institutions with international standards, modern pedagogical Priorities were defined for the formation of an expert person with a new outlook, who can organize his activities on the basis of theories and best practices, and for reforming the education system.

The central object of the educational institution is a holistic pedagogical process, but the results of education and upbringing depend not only on the pedagogical technologies used, but also on the conditions created by managers and teachers to achieve the best results, and on the relationships in teaching. Working with teachers, evaluating their activities, encouraging teachers to work effectively and creatively, creating a comfortable psychological environment in the pedagogical team, providing

comprehensive support and assistance in difficult pedagogical situations, studying the dependence of management results on the adaptation system.

Education and upbringing in the conditions of implementation - these are the tasks designed to solve the flexible management of pedagogical systems.

Adaptive management means a purposeful, psycho-economical, resource-provided interaction process between management and managed subsystems to achieve a planned result, taking into account individual characteristics and the environment.

The basis of the adaptive management model is its flexibility due to differentiation and individualization based on taking into account the psychophysical characteristics, inclinations, abilities of the participants of the pedagogical process with mandatory compensatory diagnosis and correction.

Both the leader and the teacher, who created a flexible model of pedagogical process management, first of all, build a management and didactic system that is optimal, comfortable and convenient for him and other participants of the pedagogical process in the implementation of educational and professional activities.

### **THE MAIN RESULTS AND FINDINGS**

Analyzing the impact of new pedagogical methods and technologies on the global higher education system in the next five years in the flexible management of the innovative development of the higher education system in the world's prestigious universities and scientific centers, the introduction of advanced teaching methods among the main trends requires the implementation of fundamental cultural changes in society, and in this process, education significant research is being done on how ecosystems should be sufficiently flexible. Because of the global problems caused by the pandemic and the prospects for the development of modern higher education and the trends emerging due to the development of science today, the search for modern technologies of higher education system management is becoming an increasingly urgent problem. The main strategic goals and tasks of the higher educational institutions of our country caused the need to improve the effective use of innovative development management technology in order to take a worthy place in the world. Therefore, the versatility and uniqueness of changing the management process of the higher education system and solving the problems of innovative development in a timely manner predetermines the search for effective options and mechanisms for its solution. Such an approach not only activates scientific research in different directions and, first of all, requires the support of a polyparadigm approach in research.

The organizational-pedagogical system of flexible management of the innovative development of the higher education system cannot exist by itself, but rather it is used as part of the organizational-pedagogical processes, which is reflected in the quality and efficiency indicators of the management

system built into these processes. Therefore, in our country, "Establishment of highly qualified personnel training system, which will contribute to the sustainable development of the social sphere and economic sectors, and find their place in the labor market" has been defined as an urgent task.

This shows that in the conditions of innovative development, the issue of ensuring the stability of quality indicators of higher education and the efficiency of controlled processes should be paid special attention to the problem of ensuring the flexibility of the higher education management system. A timely solution to this problem can be implemented by developing and effectively implementing the concept of an organizational-pedagogical system of flexible management in universities in conditions of innovative development based on new requirements.

However, questions remain open as to what conceptual foundations the organizational-pedagogical system of adaptive management in the higher education system should be based on, what pedagogical laws and principles of the development of the higher education system should be implemented, what organizational structure it should have, and what management models will ensure the optimal interaction between them. One of the urgent problems is to increase the number of initiatives for the reasonable solution of such problems.

The conducted scientific research shows that in the conditions of organizational and pedagogical changes in the higher education system, the formation of a flexible development management system at the level of the higher education system as a direction for improving the system of training specialists is limited by methodological and technological uncertainty. This creates the need to further improve pedagogical conditions at the local level for managing innovative development processes of the university, in the unsystematic selection of management decisions, methods and mechanisms of their implementation in the higher education system. From this point of view, a more in-depth study of the issues of methodological justification and organizational support of the flexible management system of the innovative development of the higher education organization, especially in the period of transition to a new ideology of personnel training in the Republic of Uzbekistan, is very important. Flexible management of the innovative development of the higher education system is a management method used by the manager who must adapt to the management system with changing or initially uncertain parameters in the higher education system.

The development of a holistic adaptive learning process in an educational institution includes the creation of such a continuously organized system of life for the student, where all possible conditions are created for his reflexive self-expression and self-awareness. The formation of a flexible educational environment and its management technology requires specific methodological approaches in the organization of experimental work in various educational institutions and regions. Systematic, synergetic, communicative-dialogic, cultural, personal-activity, psychological and psychotherapeutic approaches are distinguished as determinants.

The systemic approach ensures the integrity of the flexible educational system, the interdependence and interaction of its target elements, the subordination of target reference points at different levels of activity and subsystems. A synergetic approach involves taking into account the self-organization of the subject similar to nature. In practice, this means taking into account all the components of the human "I" when organizing the activities of any socio-pedagogical system.

The dialogue-dialogic approach consists in establishing a dialogic interaction of all subjects (objects) in an open and equal relationship in order to achieve the predicted final results. The cultural approach includes the integration of special, general cultural and psychological-pedagogical blocks of knowledge on certain academic subjects in the adapted educational environment of educational institutions in the process of holistic continuous education.

Personality-activity means taking into account the zone of proximal development in the educational system, taking into account the natural characteristics of each person, in order to more fully reveal his abilities and opportunities.

The entire educational space of the educational institution should contribute to the free development of the individual. This humanistic idea can be realized if each link of the adaptive learning environment (educational institution) fulfills all the functions listed below.

Motivational-incentive includes the use of various types of incentives that lead to the formation of needs and motives for activity, taking into account the nature-like qualities of a person.

Free self-determination is the self-orientation of a person in the educational space, self-determination of the profile, the necessary additional educational field of knowledge and relevant activity for self-realization. Propedeutics and rehabilitation include preliminary study of the individual's capabilities and abilities, maintaining students' confidence in their abilities, removing psychological complexes, forming positive attitudes and instructions in them.

The task of the correctional-compensator is to correct behavior, the causes of poor development, to eliminate pedagogical and psychological neglect of the individual, as well as to eliminate defects, disorders and individual anomalies based on psychological and psychotherapeutic methods. A clear knowledge of the content of activities in the entire structure of functions by teachers and managers in the formation of an appropriate educational environment creates the necessary conditions for the implementation of a holistic system of life of managers, teachers and students.

The adapted educational system of the educational institution requires each subject of self-management and co-management to reflect on their own activities. Based on this, there is self-awareness of one's actions not only from one's own position, but also from the position of other participants in the process. In such a system, reflexive management includes the transformation of the leadership position of the educational organizer, the head of the educational institution, the teacher, and, accordingly, the student, teacher, and leader of any level into personally equal positions.

In practice, this is very possible when adopting pedagogical technologies such as multi-level teaching, flexible teaching, collective and group teaching methods, modular teaching, as well as the technology of reflexive control depending on the situation. Like the traditional education system, the adaptive education system has a fixed content.

Content in a flexible system should be accessible to all, focusing on the least able students rather than the most able.

Only in this case, we can count on the real development of the standard without physical and mental overload for most students. In addition to the basic content, the child can expand and deepen his knowledge in any area that interests him. One of the important features of the adaptive learning process is its productivity. Various pedagogical technologies are used in the flexible system: cyclo-streaming, differentiation of levels, adapted educational methods, modular and multidisciplinary technologies.

The common feature for all these technologies is not only the content of education, but also the structure of students' activities with an emphasis on independent work, self-development of the individual, his activity and creativity, support and multifunctional support.

As for the teacher's methodological arsenal, in the traditional system it was very diverse. However, the main difference is that in an adaptive system, the application of various methods is placed on a solid reflexive basis. The methods are chosen not randomly, but in close connection with the content of different levels and the chosen pedagogical technology.

The administration of the educational institution and its pedagogical team build management on the basis of the principles of a humanistic educational environment and create conditions for the formation and development of the personality of teachers and students. It is aimed at creating such forms, content and management methods that ensure effective disclosure of the individuality of a person, his interests, personal qualities.

Certain aspects of solving the problems of managing the innovative development of higher education were studied in candidate and doctoral theses of CIS scientists. In our country, R. Dzhoraev, Sh. Kurbanov, U. Begimkulov, Sh. Mardonov, F. Zakirova, N. Muslimov, Q. Olimov, Sh. Sharipov, E. Yuzlikaeva, J. Yoldoshev, U. Inoyatov, Ya. Ismadiyarov, A. Magrupov, S. Turgunov, M. Yuldashev, M. Mirsolieva, U. Khodjamkulov and others tried to reveal the innovative factors of the development of the higher education system. It is known from these studies that the development of human capital in the modern era poses important tasks to the higher education system.

For this reason, special attention is being paid to comprehensive development of our country's economy, formation of strong personnel potential, and innovative achievements in science to achieve training of new generation specialists using personnel training technologies in our country.

E.Yu. Ignatieva in her doctoral dissertation deeply studies the important features and laws of pedagogical management of students' educational activities in the educational process of a modern university and reveals the paradigmatic features of innovative management in the modernization of higher education.

Z.V. Lukashenya, based on his scientific research, tries to clarify the pedagogical conditions necessary for the innovative development of the higher education institution and the conceptual basis of pedagogical consulting. Yu.V. Torkunova's doctoral dissertation researches the strategic possibilities of the pedagogical system of providing quality information and analysis of innovative and educational activities in the higher education system. I.F. In Filchenkova's scientific research, the methodology and technologies of involving professors and teachers of the higher education system in innovative activities are developed.

Based on the analysis of scientific research in this field, we believe that it is necessary to note that no special studies have been conducted on issues related to the creation of organizational-pedagogical systems of flexible management of innovative development of higher education institutions. Especially in the above scientific researches, we can observe that insufficient attention is paid to the study of the problems of formation of organizational-pedagogical systems of adaptation aimed at innovative development, the management system of higher education at the level of the educational organization, and the justification of the results of balanced indicators.

It is of great importance to take into account its principles in the management of education. The following principles are provided in the scientific literature: scientificity, systematicity and completeness, equal distribution of rights, duties and obligations, impartiality and complete delivery of information, impartiality in information, integrity of information, humanity and democracy, leadership and collegiality of a person; pedagogic tact, tolerance, uniformity in pedagogical positions, authority of expertise in leadership, interaction, education, spirituality, health, modernity in knowledge and skills, intellectuality, cultural maturity, prestige and position, authority of expert, political culture,

According to L.M. Umarov, "Currently, various approaches are being developed with reference to information and communication technologies to find a solution to the problem of providing continuous education of pedagogues, their independent work and providing methodical support to them. In fulfilling the requirements of the state educational standards and improving the qualifications of pedagogues, developing the management of their professional competence, a leading role should be played by seminars related to the current problems of education, updating of educational and methodological complexes, preparation and mastering of didactic materials, manuals, recommendations, and active methods of training.

The President of the Republic of Uzbekistan, Shavkat Mirziyoev, in his report at the extended

session of the Cabinet of Ministers, dedicated to the main results of the socio-economic development of our country in 2016 and the most important directions of the economic program for 2017, paid special attention to the issue of further reform and critical evaluation of the education sector, its improvement: "At previous meetings the state of affairs in the field of education and science, implementation of the state's youth policy, introduction of new, modern methods of education, including information and communication technologies, was analyzed.

Implementation of urgent tasks in this regard is of strategic importance for our youth, our society and the future of our country" said the President.

The most characteristic features of flexible management of pedagogical systems are as follows: first, in the process of flexible management, conditions are created for each participant of the pedagogical process with different inclinations and abilities. Under the circumstances, it is necessary to understand what is suitable for the needs and motivational areas of the subjects of the pedagogical system. Secondly, adaptive management is built from the physical nature, social and spiritual-ethical essence of a person through the characteristics of its subjects and the conditions it creates.

After all, "Today, when we think about solving the complex and important issues that life is changing rapidly, we are once again convinced that their solution is related to education and the formation of the worldview of young people on the basis of knowledge, high spirituality and enlightenment. we will grow."

Thirdly, flexible management, on the one hand, seeks to take into account the individual characteristics of a person (scope of needs, level of perception, empathy and ability to participate in the activity process) as much as possible. flexible response to socio-cultural changes in the social environment.

The purpose of adaptive management is to maintain and develop the individual, to educate a thinking individual. The goals should be presented in such a system (hierarchy) that the objective relationship between the main need components of the person and the main components of the educational content (knowledge, methods of activity, attitudes) is realized. The goal is also to create conditions for each individual to independently, consciously choose his own strategy of behavior, lifestyle, self-awareness and self-improvement in the conditions of human culture.

In the implementation of adaptive management, components such as the importance of relationships, beliefs, and motives of activity are important in the educational content, and in this environment, mastering the educational content cannot be mandatory for all students.

Flexible management of the educational process is based on a fundamentally new model of educational organization, which ensures the reliable implementation of the basic rules of the theory of activity in practice. Teaching, as one of the types of human activity, becomes an active, independent, controlled activity in the conditions of a flexible system.



Adaptive management requires each to self-manage and co-manage, to reflect on their own activities, resulting in self-awareness of their actions and positions of other participants in the pedagogical process.

### **CONCLUSION**

Adaptive management of pedagogical systems is based on general systems theory and a humanistic approach to understanding the individual. This is based on the fact that, on the one hand, these theories have conceptual formulas that take into account the relationship between the person and the environment, and on the other hand, they defend an optimistic view of the potential abilities of a person. Here, the main issue is not the weakness of a person, but his strength, the desire to solve the tasks that life has set before him, in the first place. Thus, the theoretical foundations of adaptive management based on the psychotherapeutic approach should be considered as a multi-theoretical system that incorporates various approaches and technological techniques that have shown their importance for the effective functioning of pedagogical systems.

A flexible pedagogical system can be described as follows: is open, because information processes occur between the flexible system of management, education and training and the external social environment; dynamic, operating in conditions of constant change of environmental factors, as well as the changing internal state of the system due to these factors; created and managed for specific purposes. The target features of the system act as critical features. Being active in the implementation of goals, the education and training system defines itself as purposeful, purposeful. The studied system is multifunctional and is able to change goals and perform various actions to achieve the result. This shows its relative independence from the external environment. The adaptive education system is based on the humanistic development of the individual, its basic rules are as follows: a person is an indivisible unit. It cannot be divided into biological and social, mental and physical, physical and spiritual, conscious and unconscious. The true reality of a person is his concrete, inner existence. Everyone is unique. Each person has an internal subjective mental experience - a source of information about a person through self-awareness in a certain place and at a certain moment of life ("here and now"). An integral feature of a person is his ability to know himself, in general, his ability to think. A person not only perceives, remembers, thinks and imagines the world in many ways, but also reflects his way of knowing, he is aware of himself as well as the world outside him.

Human personality is at the root of all professional actions of the leader and teacher within the framework of adaptive management. Therefore, the main, decisive component of his activity is the realization of the integrity and self-worth of a person. The educational institution, as a socio-pedagogical system, responds to changes in the state-public order by reconsidering its attitude as a person (teacher, student, pupil, parent). The relations between the participants of the pedagogical process should be cooperative and partnership, and the relevant management activities at all

hierarchical levels should be converted from subject-object to subject-subject relations on a reflexive basis.

The main condition of a developing educational institution is that leaders and teachers fulfill the main task - the stimulating beginning of the development of each student's personality. Their goal is to provide motivational management of a person's education. The primary task is to form such a mechanism of psychological and pedagogical stimulation that ensures effective and efficient activity of all participants of the pedagogical process.

A task for a student or a teacher to complete a plan, an updated program of educational activities, creating conditions where the task becomes a motivating factor for self-awareness is one of the most pressing problems in the theory and practice of personality management. Thus, self-awareness is the initial principle of motivation, which increases with the development of needs and is primarily educational. After deep self-awareness, the following processes begin to develop: self-determination - self-expression - self-affirmation - self-awareness - self-regulation. All these deep mental processes constitute the reflexive nature of the self-development of the individual.

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