

### SPECIFIC CHARACTER OF THE MANAGEMENT SYSTEM IN EDUCATION<sup>1</sup>

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Higher school as an educational system secures the all-round harmonic development of a person in the process of their interaction and forms the potential of his activity for the future, thus forming a person. One should take into account that a person's interests, ideals, aspirations, outlooks and views are purpose-oriented; a person has the experience of knowledge, abilities, skills and habits; he has got sustainable peculiarities of the psychic processes connected with attention, perception, thought, memory, emotions and will, as well as biological personal characteristics of temperament, character, gender, age; and a system of abilities. The process of forming a personality and its result is called education.

On the one hand, this is an objective process subject to norms common for all people. On the other hand, it is of an individual character due to certain reasons. Taking into account common norms of education and individual characteristic features of a person and considering them in connection with his positive abilities, interests and inclinations, helps a higher school achieve the optimum result. Taking into account norms of getting previous experience, which determine the consistency and logic of the development of the educational process, also acts in favour of the process.

A system of education is based on objective norms and, consequently, is of a determined character. It has nothing to do with risky (probabilistic) or unclear situations and all processes are mainly planned. From the point of view of relative stability of the processes in the

system, one can assume the unambiguously definite character of management processes in the system and this definite character is achieved through a universal hierarchical structure. One should recognize that functional procedures and managing them in the system of education must be perfect. This is possible due to the stable character of the management system's structure, stability of its bonds and a monotonous change of the functions' parameters. In reality one can see a vivid dialectical contradiction between objective regularities, which determine the system of education as it is and between local, tactical and strategic factors producing their influence on the system.

Managing the process depends on the contents of teaching materials, on the character of the training activity and on methods and forms of teaching, because characteristic features of a personality and the essence of education and development greatly depend on the studied material and on the way it is studied. The educational process includes situational aspects as a set of conditions and circumstances leading to a certain situation. In other words, a certain sphere of the system's conditions comes into being, which is characterized by target indicators. Numerous situations influence the quality of functioning of the managed educational system due to the accidental nature of the situations.

There is a cybernetic error between what is given to an individual and what is mastered by him: first, in an open manner through the contents of training material and, second, in a closed manner, through those types of activity, which are programmed by education as a process. However, this error is caught by the external environment only, because the mechanism in the system of education, which establishes the degree of correspondence between the system's behavior and the set objective every moment, is unfinished. Functioning of the purpose-achieving mechanism needs a definite set of regularly renewed quantitative data and their processing algorithm to calculate the quality of the educational process management. This can be done, if parameters determining the objective are quantitatively measurable. The tasks of management are to solve these objectives.

At this stage of development managing the system of education becomes complex, i.e. it is able to take decisions not only regarding organization, but also the essence of education. Here the decision taking process is governed by its own laws, is of an alternative character and accidental nature. Achieving such a level in

<sup>1</sup>The author has expressed the special purpose functions of management in the social and economic spheres in the following publications: *The Structure of Management in the Social and Economic Spheres*. – Bishkek: Reform, 2000, # 1, p.79-81; *Economic tasks of a manager*. – Bishkek: Reform, 2002, # 4, p. 68-70; *Organizational Management in Economic Systems*. – Bishkek: Reform, 2002, # 1, p. 71-73; *Special Purpose System Management Outline* – M.: Machine Building Techniques, 2003, # 2, p. 46-47; *Structural Formalization of the Educational System*. – B.: Ilim, 2003, # 1, p. 33-38; – M.: Engineer, Technologist, Worker, 2004, # 5, p. 31-35; – <http://www.daijest-elim.narod.ru>; *Problem Teaching of a Student*. – M.: Engineer, Technologist, Worker, 2004, # 8, p. 23-25; *Objective System-Defined Characteristics in Small Businesses*. – M.: Engineer, Technologist, Worker, 2004, # 12, p. 7-11. He has continued developing the topic in his new works connected with the educational system management.

management is unavoidably connected with new contradictions and, consequently, with concentrating on their solution to the detriment of education.

One can assert that the contents of training materials is not static, but is monotonously improved and supplemented due to the objective need of a person to accumulate knowledge and produce new instruments to get new knowledge. This is the function of the fundamental research and the system of education makes its contribution to it. The available knowledge should be channeled to the development of more effective instruments and means of getting more purposes. This is the function of the applied research and in the system of education it is developed especially successfully.

Teaching materials provide new knowledge of how to improve and apply knowledge, i.e. the function of education is performed.

The system of education is active in performing ethical, moral (removing conflicts among members of the society) and aesthetic (the development of creational abilities and inspiration) functions.

It is reasonable to say that the system has an object and a source of situations and the object determines the action of the source. The object and the source of situations are within or outside the educational system or they can change their location, being first inside and then outside the system. Education at the expense of one's own system resources is characteristic of the first variant and the second variant implies observing the processes in the external environment. If the object is inside the system and the source is outside, then we can speak about the investment process. In the other case educational standards will be exported.

Thus, management of education acquires a new quality at management level. In this case it is important to classify the states determining the situational management: internal, conjugated and system states. The internal state includes parameters, characteristics, functions, resources and experience of a certain system. A process, in which two systems unite at any level of co-subordination in the management structure, is a conjugated process and its regimes and entrance and exit criteria of the systems, labour intensiveness and regulations describe this conjugated state. New quality signs facilitating the functioning of a larger system (probably consisting of two parts) determine the state of the system.

A transfer from the internal to the conjugated state and further to the system requires, first, a new and higher management level with its differences in quality and, second, the ability of the system to evolve changes. This is also an objective requirement and a consequence of one of the main principles of the systematic approach – coherence: the managed system has external criteria at the entrance and exit and these criteria show to what degree its behaviour corresponds to the task of management. If another system, conjugated with the managed one, sets entrances, then the functions of concordance become determining and are successfully performed through the coherence principle. A similar relationship will be achieved for the exit criteria of the

managed system and for the entrance criteria of the system conjugated with it. That is why, if a system achieves its purpose through the free choice of the whole complex of internal criteria intended for the necessary distribution of its resources and these resources completely satisfy its behaviour with regard to external criteria, it must put into operation the principles of the necessary variety (group management), an external supplement (regulating reserves), relativity (performing the functions of the object and subject of management), emergency (the ability to evolve), correspondence (functional, elemental, organisational, administrative). One should emphasise that the system with its internal state is characterised by behaviour (changing, regulating and setting new levels of parameters), whilst at the system level such a property as a change in the structure (evolution) and, first of all, management is added to the behaviour of the new system. If the first state needs regulatory operations (stabilisation of parameters, their planned or arbitrary indicators in the monitoring of changes regime) then the second and of course, the third state require adaptation and integration. Control as the main function of management is to be developed to monitoring the complex of compulsory and mutually related operations: observation, analysis, forecast. The process of regulation is supplemented with the operations of the beginning and the end of the functional actions of the object (in this case of the educational system). This is a change from particular to general management.

Organizing standard cycles of management and monitoring their parameters is effective and can become a means of solving arising contradictions. The cycles of management are united either without a technological break or with its negative value. In this case preventive management conditions are created. Very important is creating the objective of functioning by the management system and this objective must have a constantly changing and oriented range of parameters rather than a simple range. Then it is reasonable to form a means, i.e. an organized system securing the achievement of the purpose with any parameters of the given set. What is more, the management system of such an organization can choose a means of action through a criterion, i.e. a concrete purpose, which can imply a result probable for the considered period and a possible result of the future situations, which is potentially laid in the results of the current states. Having a free choice of internal functioning criteria (exits), the system must take into account its striving for coherence and a system state. In the course of the process one studies the conditions of the entrance tasks and corrects the behaviour. If management fails to fulfill its task in a certain situation, it can change this task to successfully achieve the same purpose. It is interesting that Cicero living 400 years B.C. said that probabilistic knowledge was a limit of the human intellect. However, accidental models are widespread today and meteorological conditions and behaviour of civilization and its societies are forecast. These models can also be applied in managing education. This implies a compulsory condition to be carried out by

management: the achieved purposes and fulfilled tasks are to be replaced with new and progressive ones provided with the appropriate criteria.

The development of the system is impossible without progress in maximising accessibility to effective decisions, effectiveness of the developed decisions and compatibility of the received results and the proportion of these results' value.

A system aiming at success needs resources so that it could choose the optimal and effective means to achieve any of its purposes. However, resources for the educational system are external and include the function of production performed by business and industrial enterprises. If education with its scientific potential has long ago become a productive force of society, then we can speak about the obvious system-forming tendency (integration) in the educational and production spheres of the society. Implementation of this tendency is determined by the social order of the society, requires the appropriate management and leads to the production of the necessary and sufficient level of resources to achieve purposes. The latter is impossible without the distribution function, which formerly was not inherent in the educational system. Later the interaction develops with the participation of financial institutes, social and medical organizations and legislative and insurance bases.

The system of education becomes self-organizing. Its management changes its behaviour and evolves and this can take place simultaneously in the self-organizing process. The system strives for international cooperation and joins consortia and associations.

The management mission actively influences educational standards and changes them and it motivates consumers of knowledge and sets new objectives. Development re-cycles.

One of the characteristic examples of the new level of management is the European Collection and Transforming System (ECTS) for educational credits. The System guarantees the free movement of groups of students and teachers. The internal situation of a higher educational institution not regulated by the ECTS develops in parallel to the ECTS.

The credit system of education provides technology, which implies individualization of training and the growth of a student's independence in education. The

first requires changing methods of delivering lectures and achieving interactive forms of behaviour, intensifying the teaching process and getting skilled in orientating oneself to the problems of knowledge and criteria of control methods. The second radically changes the methods of students' independent studies. Here the system of management actively interacts with the pedagogical staff of the higher school and helps teachers.

In the Republic this is shown in enlarging the two-tier- system of education through educational standards and unifying them with European educational technologies, through strengthening the independence of the educational system by adjusting methodological material to the conditions of the credit educational system, through getting copyright for teaching programmes, methods, simulators and modes in the world systems of intellectual property. The management share of organizing independent expert examinations and experts' meetings, methodological seminars and conferences and developing grant projects to ensure the financial support of the educational system, is great.

The specific character of management is in the necessity to set preventive purposes to outdistance competitors, in the ability to forecast its development and compare behaviour and its results with analogues, to dispatch, coordinate, synchronize, stabilize and motivate (but not at the reflex level), to outdistance arising situations, to make economic evaluations, to work in a risky rather than determined environment, to compete with the external environment and permanently improve the results to be valued by independent experts, thus approaching the level of elite higher educational institutions. It is necessary to concentrate on individual curricula and individual teaching, taking into account the personal development of students. It becomes possible to help teachers, authors of methods, means and modes to organize the teaching process in special spheres of knowledge. This is based on the previously described essence of the system principle of coherence and a natural interest in improving the educational system of any level and region. The appropriate conditions have been stipulated by the world integration of education.

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## GENDER PLANNING OF THE EDUCATIONAL BUDGET IN KYRGYZSTAN<sup>1</sup>

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A budget plans necessary expenditures for a society and assumed sources of revenue for the Government and touches upon the interests of each citizen. It directly

or indirectly influences the opportunity to get education; determines, what grants and who will receive them; how services of public health care and education will be rendered; what salary will civil servants, teachers receive, etc.

Most of budgets don't plan resources rendering to men and women. At the same time budget size

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