Characteristic features of process control of students professional education

V.V. Ygorov, I.I. Yerakhtina, S.M. Udartseva, G.M. Smirnova, E.G. Ogoltsova

Karaganda State Technical University Mira Boulevard 56, Karaganda, Kazakhstan

Abstract. In the article there are considered peculiarities of process control of the students professional education of the higher educational institutions, level functions of education process management. The analysis of management process of professional education of the student from a system-functional aspect was made and it allows to establish that such management and is pedagogical system since it represents the ordered summation of functional components. Management is considered as not a single action, but as the series of the continuous meaningfully filled interrelated actions. Then was drawn the conclusion that direct participation in activity will provide to a young man valuable experience of realization of initiatives, and will become a factor of increase of self-confidence.

Keywords: professional education, education process management, governance challenges

Introduction

In the most general understanding “management” is the function of organizational systems of different natures (technological, biological, social), providing preservation of their structure, maintenance of a certain condition or transfer into the other condition according to the objective laws of the given system existence, implementation of a program or a consciously desired goal. The theoretical approaches to the management are laid according to the general systems theory [1], synergetics [2], and “organismal management theory” [3]. Management is understood as the activity which is focused on the development of decisions, organization, control, regulation of control object in accordance with the set purpose, analysis and summing-up on the basis of verifiable information.

On the ground of analysis of management literature it is possible to mark the functions of three basic level functions of education process management. The first is governmental which determines the macrosystem of character education in the governmental and intergovernmental space in whole. On this level the control subject is the state, pursuing a definite policy in the educational sphere. The second level represents an intrastate (educational) system, which consists of the regional educational spheres. The regional management is characterized by the factor that functions in conditions of continuous change of external and internal environments and the problem involves the most effectively answer to these changes. The effectiveness of the management system on the given level one can define as the ability to provide safely realization of the regional policy by forces of the territorial institutions and organizations under the optimal economic expenses and social losses. The third management level is characterized by that the subjects are the educational institutions. Generally, the management process at this level includes two interdependent and interconnected parts: firstly, the administrative unit, as the subjects of which there are serve the head of an agency and stuff, which develops and determines the activity, purposes, tasks and tentative solutions; secondly, the managemental part, that is performing, the subjects of which are the specialists, whose works are directed to realization of stated objectives. The managemental actions, as a rule, either special for each educational institution, or are of organizational-managemental nature and are not the parts of legislative-normative administration. The management on the given level has the twofold nature and are considered as a process, and as a result of organized on purpose and a controllable society function – formation of social and professionally significant individuality.

Statement of the problem

At the present time in the former Soviet Union there is being formed the large-scale modernization of management system of the higher and secondary vocational education. It takes place in the exceptionally severe and contradictive conditions of democratic reforming both of national identity in whole and vocational education system in particular. From our point of view, the most fundamental are the negotiation of departmental approach to the educational institutions management, cooperation formation of the state and social forms education management; development of public initiatives in the educational system; dialogue organization with the local society; creation of “horizontal” management structures; formation of procedures of making the management decisions providing for the public participation in the projects development of solutions,
education development as the of the open governmental and social system on the basis of liability distribution between the subjects of educational policy and enhancement of the roles of all the members of educational process (of a student, a teacher, a parent, an educational institution).

Theoretical framework

Analysis of pedagogical literature shows that many scientists regard that the process management complies with the general regularities of management [4]. Process management in the educational institution is the certain type of interaction, existing between the two or more subjects, one of which in this interaction is in the position of the subject of management, and the second one – in position of the object of management.[5].

Methods

The methodological ground of understanding the conceptual foundation of process management in the vocational education institution are the conditions of system and system-functional approaches, allowing to reveal the function mechanism of management taking into account the significant intrasystem communications and the external environment, consideration of management from a perspective of the integral system, interaction and its components in varied connections and relations. As S.Yu. Trapitsin [6] notes, management is the “complex of interconnected, interdependent and coherent according to the targets, place and time of interaction of the objects and subjects of management taking into account their belonging to the system” [6, p. 25]. Tretyakov P.I. considers that there is objectively exists the “necessity of the management reaction for the requirements of the external and internal environments under conditions of absolute freedom from the conditions of existing stereotypes” [7].

Discussion

Consideration of the process management from a perspective of system-operational aspect allows determining that management is the pedagogical system, inasmuch it represents the ordered set of functional components. If to mark out the subject or group of subjects, as management subject, the principles content of system-functional approach reveals in the following conceptual issues: manage the process means to manage the joint activity of subjects, in the course of which there emerge the absolutely particular plain communications; management subject is not only individual, but also a group, community, that means the collective subject. Admitting the group as the collective subject of management, it is possible to learn all the attributes of the subject: motives of group work, objectives of group work and so forth [8].

Management is not the one-time-action, but the series of incessant meaningfully replete interconnected actions and, an our opinion, the system-functional approach stipulates inclusion of the characteristics of the controlled process (sociability, integrality, subjectivity, valuation-semantic orientation, social contextuality, internal and external productiveness, expandability of social perspectives) in the task context, functions and management content. The functions of the process management in the vocational education institution shall be understood to mean the types of the management activities by the achievement of a goal, reflecting the essence and content of the management process. The functions make actual the guidelines in the designated purpose of management, its character and content: planning, organizing the activities, managing and control. The listed functions are united by the cohesive functions of communication and making the decisions.

The ideas of the integrative-developmental approach are of doubtless interest for the given research. Process management of the professional education, according to this approach, presupposes the possibility of the pragmatist and personal synthesis in the organization of such a management. We can relate to them: management directionality towards the self-actualization, self-development of students in different types of activity; management orientation to the subject and subject relations; strengthening of the of dynamism of management subjects role. The given approach makes actual by reference to the modular management structure (social institutions, expert councils, coordination councils and etc.), matrix organization of activity, allowing management to be more flexible and differentiated.

The structural components, subsequent to N.V. Kuzmina, are understood to be the basic characteristics, the collection of which distinguishes a phenomenon from all the others [9]. The discussed above theoretical grounds of process management set for the following positions which characterize elements of process management of students vocational education: principles, purpose, subject, object, subject-matter of the management activity, result. The choice of the management principles is accomplished on the basis of the basic principles and strategic humanization concepts and education democratization, and also the principles of management by educational systems. Reasoning from this fact, the management principles of the students vocational education process are systematic nature and management integrity, democratization and humanization of management activity, governmental-
social interaction, providing joint problem resolution by the educational institutions, society and power. Management humanization is carried out through the individual, approach in management, inspiration, respect and trust to a person, holistic view to a person. The management democratization is realized in collaboration on all the levels of cooperation, on the basis of social equity, group decision making; the specific characteristic of the given principle consists in that besides the liberty of actions, each member of process is endowed with responsibility. Realization of the given principles is provided by: ruled and regulations, mechanisms of real and liable participation of all the process subjects in taking and realization of decisions, readiness of all subjects for participation in management, mechanism of system communication about solutions and enforcement mechanism and solutions realization of the education administration.

Realization of vocational education functions stipulates the formation of various methods and forms of interaction: when management is accomplished taking into account the public and society opinion, when there is performed recruitment of the representatives of the external environment in capacity of administrative functions performers, is activated public and community participation. It predetermines the specific forms of process management of students vocational education: social procurement, address appeals, consulting places, concurrent programming, public evaluation.

The integrity of management problems and function specification will be provided by the new management structures which will allow minimizing the centralization of management, strengthen the communications inside the management sectors, and increase management mobility. Such a management can emerge owing to the project groups, work teams. The project group is the modern management structure which is created for solution a specific problem, often of complex character. The meaning of the project group is in gathering into a one team the most qualified stuff members from different fields for realizing a difficult project within the established deadlines with the given quality level and within a framework of the material, financial and labor resources which are given for that purpose.

By way of work of the project group as of management organizational unit one can mention: the integration of different business activity; complex approach to the project realization and problem solution; concentration of the all efforts on solution of the problem; the large spectrum of occurring communications and interactions; enhancement of individual responsibility of a certain member. The work model of the project groups are based on the paradigm of democratic open interactions, the character of which one can determine as coordinated subject-subjective and object-objective relations, based on voluntary and equal exchange of comments and correlate by supposed and achieved results.

Providing the communication and interactions of educational institution with external environment can be carried out through creation of open structures, allowing taking into account in management the objective interests of society, local government bodies and by means of municipal community and different social groups which reflect interests. The organizations which are able to participate in open interaction with vocational education institution are various. They can be managing and supervisory structures; government agencies, to which refer the governmental and municipal authorities; legislative government institutions; social movements; mass media; society. For the open structure, which establish cooperation with the other institutions and organizations, it is specific the absence of the strict work regulation, detailed division of work into work types, flexibility of management techniques, decentralization of decision making.

The specific character of process management methods of students vocational education is connected with characteristics of activity performed by the students: with assumption of purposes and objectives, formalization degree, features of mediums. The system approach allows establishing a level of management integrity, degree of interrelation and interaction of its purpose-containing elements, hierarchy of goals in activity and techniques in operation.

It is ought to be taken into consideration that the subjects of vocational training process in a vocational education institution are groups different in structure and status: students, teachers, youth associations, representatives of social and for-profit organizations. The governing conditions of interaction efficiency, according to R. Kanter, are “maintenance or stimulation of good performance, when it is necessary to allow participating everybody, who finds himself competent, avoidance of slapdash actions and learning many options, simultaneous analysis of problems” [10]. The factors, influencing the choice of subjects’ behaviors are sympathy in assessment and situation understanding, sense of actions, solidity and consent. The absence of thereof will make the relationships oppositional, antagonistic. The main characteristic of interaction is (in a sense joint) the general subjects’ activity, in such a case each of the subjects can pursue its own aim, that is different from others, and the general activity is necessary condition for achieving the aim. It causes the obligatory
processes of making agreement, concordance, reciprocal concessions, and compromises. Certainly, the traditional position of the aims’ process presentation by the subjects in the form of requirements to the joint venture is not enough.

There is also the method of destination specifications method, when the purpose is formed in the form of characteristics of desired condition of something. In our research there are worth noticing the views of M.S. Kagan on the method of goal-setting, which considers, the values and personal meanings are impossible to be formed neither by message transmission, nor by direct interaction. Just because that they are personal, that they mast by worked out independently and collectively, but not taken ready, they are formed on basis of experience, but not by the absolutely reasonable way. By reference to the conception of M.C. Kagan, the value understanding is formed in a person only in case when another person sees him like fundamentally equal one, free in choice of the subject values. It is important the proposition erected by M.C. Kagan, about that “to transfer to other person his values is possible only in the process of intellectual enrichment that is such a behavior, which is based on the relation to another one, as to an equal subject” [11]. Subjectification of values happens in an activity of particular kind, in value and sense bearing communication. It acts lie a multivariable dialogue, which fixes the communication of the process subjects on sociocultural, interpersonal and internal-personal levels and, consequently, is realized by conventional way.

Inspiration and motivation to the joint venture of the subjects of the vocational training process is possible in conditions of co-management in a vocational education institution which is characterized by collective nature of making management decisions, by development and encouragement of devolving management power, initiative stimulation. The concept “co-management” can be defined as the process of organizational-management relations, providing the development of educational activity, by means of voluntary delegation of authorities. The point of co-management is in free-will transfer of subjective, management functions to the students by the authority of institution by means of including them into a joint venture. The students must have responsibility for discussing, acceptable and realistic tasks, such relations will inspire the transparency and openness of making decisions. Realization of these principles by means of purposes harmonization, unity of direction and delegation of authorities acts as guarantee of the effective co-management as forms of organizational-management relations. The characteristics of this activity are availability of the shared objective and general motivation for the participants; division of the activity into the functionally related components and distribution of them between the participants; consensual actuation; the general final results. In other words, co-management acts as a consolidate part of the common circuit of management interactions. According to E. Locke the most important conditions of co-management efficiency are comparable levels of participants’ competence [12]. T. Wall singles out the functional interconnectivity of the subjects and variety of individual skills in that way everybody would be able to perform the all or the most part of the group tasks, and also to accomplish the feedback coupling and the activity assessment in terms of group activity – this is the main condition of efficiency of “participation in management” [13]. Denison considers that the success cause of “participation in management” is the high degree of a man’s involvement into the working surrounding; the emphasis is made on the coordination, as a main mechanism of planning, solution of problems and making the decisions; the ability of group of people in contrast to a single individual will better solve the complex multistage problems [14]. The conducted analysis allows to single out several basic provisions which define the content of the concept “co-management”: the joint setting the goal; openness and transparency in relationships; regular meeting of the head with his workers; participation of the workers in development of solutions; delegation of authorities.

One of the most significant organizational-substantive forms of co-management is the institution of the social agencies. Today there exist the two main varieties of such agencies: the separate agencies of pedagogical, student’s and parental self-management; the agencies of joint management which are given the status of the bodies of social administration of the educational institution.

Besides the public division, which is in any case connected with education, into professional and unprofessional, it is also possible to divide it conditionally into “intrasectoral” and “non-sectoral” (non-educational). In this case it is possible to single out the circle of the social organizations which is more similar to the institution, organizations which are directly and closely connected with the institution of the secondary vocational education, and the more distant circle of the potential partners of education system from the other sectors of public life.

Along with the specific methods of the administrative bodies activity (order, instruction, requirement, affirmation, methods of encouragement, punishment and responsibility) and bodies of social education administration (public assignment, public opinion, of social guarantee, and social examination)
there can be the other ones. Among them – the methods of management cycle, pedagogical instrumentation of a certain business, personal example, advance confidence, positive stimulation, request, advice, and proposal. The methods perform the stimulating and mobilizing functions, that is revealed in activation of the management subjects and change of their target and value purposes. Let us name some of them: active marketing, meetings with the organization leaders, presentation organization of socially useful activity of the secondary vocational education institution, organization of the conference grounds.

Means of pursuing the goal of the management process of professional education are programs and the projects having complex character. All the scientists see eye to eye that professional education should be carried out so that social and economic problems of the state became a practical material for training and development of professional activity of students. At this material it is possible to teach the students to work really with the practical problems and actively influence on their solution. Expanding a circle of tasks and social problems solved by the students as a training practical material from the list of the real problems of local, surrounding community, “such a system develops into a system of the state and public social partnership”, as considers Yu.V. Gromyko [15].

Inclusion of a young man into a socially useful activity is the key means thanks to which the youth can formulate clearly their professional obligations and make the contribution to creation of the economically stable society. Direct participation in activity will provide to the young man valuable experience of realization of initiatives, and will become a factor of increase of self-confidence.

Conclusion

As a whole, the marked out contents, forms and methods of management allow realizing: openness of professional education inasmuch as realization of the vocational education process of the students is carried out in various formats of the interaction presupposing arrangements, conducting the open dialogue, decision by the students of professional problems of local, surrounding community; integrity as on the one hand, all the process of professional education has a uniform valuable and semantic orientation, and on the other hand, there is created the uniform aiming at the solution of a backbone problem through the projects, processes, governing bodies; a subjectivity which is provided: firstly, with the designed contents which is eventful by the student's life and enriches the subject experience of each student; secondly, with the organization together with teachers of social and active, public useful activity of the students, supporting the dialogue interaction of the all subjects of the vocational education process and stimulating the active and subject position of the students; the valuable semantic orientation inasmuch as condition of acceptance of values and purposes in the institution by a conventional way, conducting the open dialogue will allow organizing the valuable and semantic communications of the students and adults, creating the valuable basis of the activity; the high internal and external productivity.

Stages of management are analyzed in detail in researches of the scientists V.P. Kvasha, B.S. Lazarev, M.M. Potashnik, P.I. Tretjakov, T.I. Shamova, etc. Many researchers such as B.S. Lazarev, M. Miles, etc. allocate the management periods: the preparatory period, the planning period, the realization period, the others suggest connecting the maintenance of stages with the projecting stages. However, all the researchers note the importance of sequence, analytical activity, and adaptability to manufacture:

Modeling (development of purposes, processes and the main ways of their achievements). At this stage it is necessary to carry out the social, psychological and pedagogical, educational examination of the situation as formulation of purposes and problems of process management of students vocational education is impossible without studying the inquiries of the external and internal environment. The sequence of actions includes: definition of subjects positions of external environment and management subjects in relation to the educational institution, definition of inquiry of external subjects to the educational institution; purpose formulation. The next step consists in definition of structure of tasks which are formulated as reflection of problems inasmuch as should contain the instruction for problems solution. It is possible to tell that the “tree” of the problems is transformed to the “tree” of tasks.

Designing

Following B.C. Bezrukova, we consider that the designin is carried out as a number of stages consistently following one after another, approaching the development of representing activity from the general idea to precisely written off specific actions. At this stage there are created the projects, target subprograms:

- at the stage of realization there takes place the development of the relevant normative documents and planned documentation for definition of the material which are resources necessary for achievement of purposes;

- the reflection, including analysis and judgment of the personal experience by the
management subjects of for the purpose of the new understanding of own beliefs, valuable orientations and practical actions.

Corresponding Author:
Dr. Ygorov V.V.
Karaganda State Technical University
Mira Boulevard 56, Karaganda, Kazakhstan

References