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INTRODUCTION OF MATRIX STRUCTURE ADMINISTRATION AS A CONDITION FOR PEDAGOGICAL COLLEGE DEVELOPMENT

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Introduction of Matrix Structure Administration as a Condition for Pedagogical College Development

The article raises the issue of pedagogical college development by means of modernization of administration structure. It also reveals the essence of matrix structure of administration, principles of its introduction in pedagogical college. Main characteristics of innovation projects are covered.

Key words: matrix structure of administration, innovation projects, vertical and horizontal connections, principles of administration, development administration.

Today rightfully an effective solution of development management of pedagogical higher educational institutions is a priority for modern educational management. The aggravation of the problem is related to the total reorganization of the educational system, review of methodological foundations of its existence. This happens for various reasons – the implementation of reforms in society and moving away from authoritarian methods of administration, innovation, not only in the educational process, but also in its administration and others.

Learning of the practice administration by Pedagogical Colleges of Eastern region of Ukraine can detect a mismatch between the needs of educational institutions in modernizing of the administration system and lack of theoretical and technological readiness of administrative and teaching staff to these changes.

Analysis of researches and publications showed that a significant breakthrough made in the educational management. In the administration theory of social systems, namely the administration of secondary schools, the working of socio-pedagogical, organizational, educational, scientific, methodological and psychological principles

that reflected in the works of V. Bondar, L. Kalinina, G. Yelnykova, V. Pikelna, N. Kolominskyy, V. Lazarev, M. Potashnik, S. Hrykoa, L. Danilenko and others, occupy the significant place.

Thus, G. Yelnykova believes that the effectiveness of administration depends on the degree of interaction between structures of different subsystems [1]. B. Pikelna studying basic laws of school management noted the fact that all systems, including organizational administration systems are so complex that they cannot be understood without previous division and subsequent synthesis [2, p. 59]. Considering the system of school administration as a complex entity, Y. Konarzhevskyy emphasizes such features as hierarchical and subordinate communications, that's in the administration structure of higher level subsystems coordinate the activities of lower level subsystems and subsystem of lower level function with respect to the requirements above and their living conditions [3, p. 23].

However, the problem of introduction of matrix system administration in the activities of pedagogical colleges is unexplored.

The purpose of this article is to characterize the essence of the modernization of administration of development of pedagogical college subject to the introduction of the matrix structure.

Pedagogical College is an open system that actively interacts with an environment in which there are constant changes, has a significant impact on the operations of the institution and determines the need for new approaches to administration. Wherein the essence of the modernization of administration is to design and development of innovations, among which an important place is occupied by organizational structures and mechanisms.

Introducing a matrix structure administration of pedagogical college, we proceeded from the fact that the effectiveness of administration of development of pedagogical college depends not only on the activity of the administration, but also on the administration activities of teachers, as they are the main subjects of innovation administration.

Matrix construction administration of the organization is to ensure that structure that focuses on project or product (horizontal structuring) stratifies on the divided structure by function (vertical structuring).

According to the scientists and practitioners the matrix structure is well proven in the implementation of various projects both industrial and social. The main features of the matrix structure is the using of existing administration capacity, the ability to attract the administration employees, temporary, monism (unity) goal, unidirectional purposes [4]. Its mobility in the horizontal direction belongs to significant advantages of matrix structure. Such benefits have no Linear or linear-functional structures haven't such advantage. In our opinion, exactly the formation of a pedagogical college or any institution, of matrix structure administration will enable the college to transition from functioning mode into development mode.

Modernization of the organizational structure and organization of pedagogical college accordance with the provisions of scientifically based theory of organizational management provides:

- the introduction of a new type of structural units focused on the key functions of innovation administration;
- redistribution of functional responsibilities of staff "top-down" (transition from vertical to horizontal structure);
- development and introduction of algorithms of administration activities and intra-normative support of innovation administration in pedagogical college;
- formation of readiness of teaching staff to administration due to upgraded their professional skills;
- attracting teachers to the administration by innovation processes through formation of organizational culture in pedagogical college involves and stimulates the expression of initiative and creative activity, cooperation and partnership.

That is, the role of the administration of pedagogical college is a clear definition of goals, objectives and requirements for the system of innovation administration, creating the conditions necessary for its successful realization, being involved in the administration of innovative educational activities of teachers. It

determines the change of work due to the delegation of part of administrative authorities, review and specification of functional responsibilities of members of the teaching staff. Herewith, delegation involves setting of goals to each employee, goals and simultaneously giving him money to carry them out with preservation of responsibility for achieving quality results.

Construction of the matrix structure is based on the following principles:

- the principle of targeting, that requires a combination of administration goal of pedagogical college, its structural units and individual employees;
- the principle of process, that provides continuous dynamics change of pedagogical college's state, that is the basis of life and development;
- the principle of flexibility, that requires the inclusion in each administration structure of professionals who must provide for changes and react to them;
- the principle of adaptability, that is appeared in changes in the content and administration structure in accordance with the dynamics of the environment;
- the principle of the systematic, that considers the relationship of all elements of the administration structure in space and time, which determines the integrity of pedagogical college;
- the principle of sociality, which is found itself in the open organizational administration structure in connection with the opening of the pedagogical college;
- the principle of subjectivity that reflects the essence of life of pedagogical college's staff.

Imagine a schematic matrix administration structure of pedagogical college development. Determine the activity of each substructure in terms of achieving goals and solving the tasks (Fig. 1).

Council is the supreme administration body of pedagogical college development. Note, composition of Council may be updated at the working of each new program development or innovation project. The Council consists of is a head of college, duty head of science, academic, educational, industrial, public works, chief accountant, chairman of subject-cyclic commissions, parents, representatives of

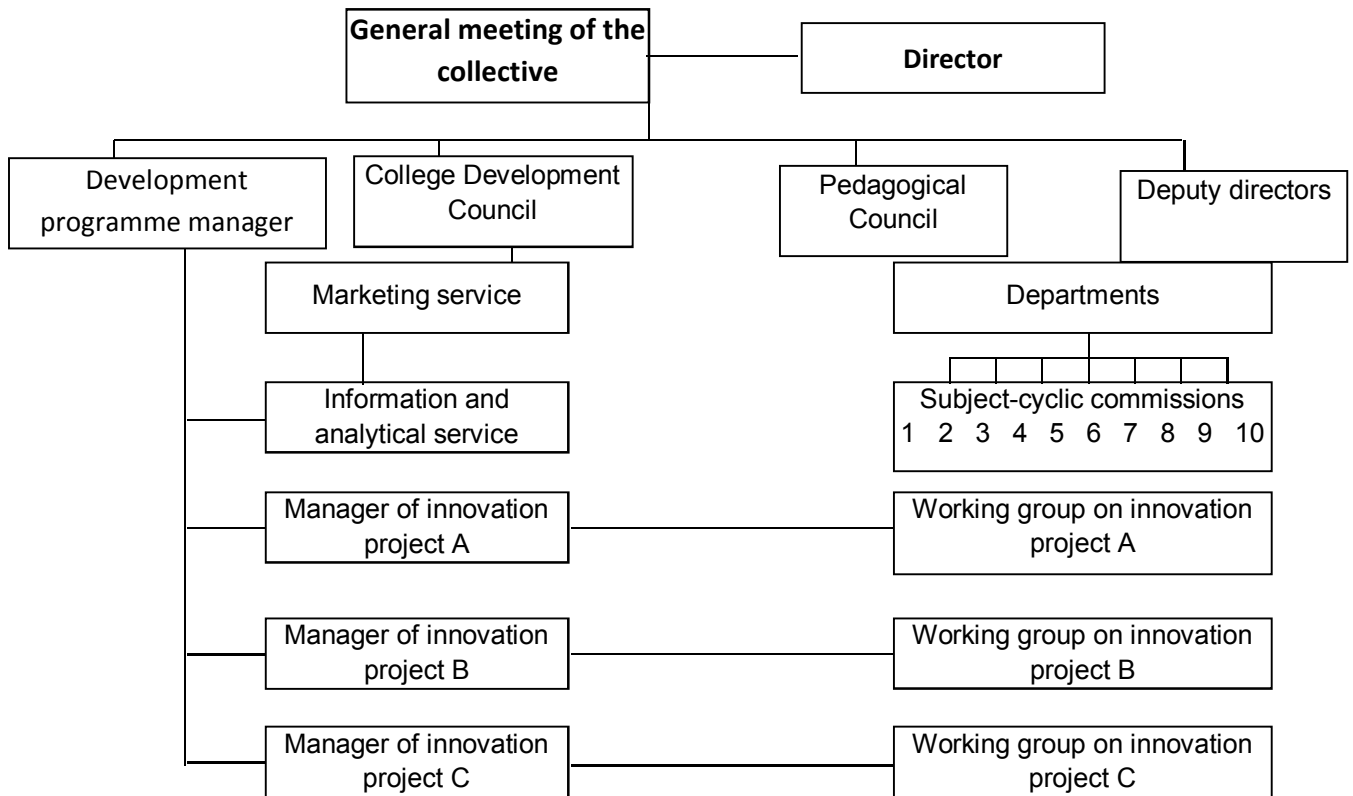


Fig. 1. Matrix administration structure of pedagogical college development

student council, representatives of the Department of Education and Science of the city and region, pro-rector of science of the respective university. The Council defines the mission of pedagogical college and the main directions of development based on the needs assessment team, region and state. It hears and discusses reports of project managers the course of their development or implementation, evaluates the results of work of projects and programs in general. Also it prepares the decision to change the program in accordance with a change of space, produces solutions that require the approval of changes to the program, and approves the annual report of the program director and project directors on the implementation of planned changes.

Almost inevitably when organizational structures change it appears questions: “Who will provide design innovation, and its implementation in the future? Who will provide the scientific and administrative administration of the people?”.

Generally (it is confirmed by the experience described in educational literature), the structure of the institutions introduced a new post, and the title of which can be very diverse, but the essence comes down to innovation administration. In our view, that person’s identity, a set of professional and personal qualities is one

of main factor in the future: if the experiment will take place and whether it will be effective, that is really beneficial for the development of an educational institutions. Thus, the key to the success of innovation activities is determined at the stage of selection of its head, and therefore, this stage should be given serious consideration. Practice shows that in most cases the appointment to this position; guided by its own director, often quite superficial notions of performance and ability to control the person who will lead this area of work. This intuitive approach often leads to negative consequences.

The deputy head of science, who are appointed by head of college, may exercise current administration of the program pedagogical college.

On the development and implementation stage of the program in his competence includes:

- definition of the main objectives for the development of the program as a whole and individual projects;
- selection of project administrators;
- control the progress of the program realization;
- planning and organization of work of the Council of development and conduct of its meetings;
- operational decisions between meetings of the Council;
- organizing of information support project administrators and relevant contractors;
- analysis and resolution of conflicts in the course of the program realization;
- organization of seminars, round tables, conferences, educational hearings, for teachers to improve their professional skills, related to the implementation of innovative projects developed;
- development and implementation of measures to overcome resistance to innovations;
- creation and maintenance of material and moral incentives for participants in innovation;

- making proposals of administrative sanctions to the application by disrupting in projects or programs of guilt of those responsible persons.

Administration of the development and implementation of innovative projects are provided by project directors, teachers or heads of subject-cyclic commissions who are most experienced with a particular direction of the college, are capable of forecasting, innovation and distinguished leadership. We are guided by appropriate professionogram developed by F. Sultanov, who defines professional qualification portrait of innovation director.

Project directors control the progress of working and implementation of the project; make their own decisions if they are not linked with other projects and do not require revision purposes, inform teaching staff about the features of the project, report to the Council on the status of development works relating to the development or implementation of the project. Also they make proposals for adoption by the Council or college administration of decisions related to the project, determine the composition of creative group team, assign responsibilities among team members, and submit proposals on the promotion of team members.

Let's give an abbreviated description of several innovative projects that implement in Stakhanov Pedagogical College.

Innovative project "Staff Policy"

The objectives of project are modernize work with teaching staff on the implementation of the mission and aim of the institution based on the analysis of personnel staff and professional skills of teachers, and in accordance with the objectives outlined normative and conceptual documents of the educational sector

The tasks of project are optimizing of staffing and teaching load, training of teaching staff to organizational change, creating conditions for continuous professional development of teachers and administrators. And the formation of genetic need for creative self-education throughout the active life, improving the culture of reflective teaching staff, the development and introduction of different models of personality interaction between students and teachers.

According to the results of the project "Staff" it provides training the teaching staff to the incomplete implementation of the standard, basic and complete higher education, introduction of new curriculum based on competence-based approach, productive and efficient use of pedagogical knowledge in professional work, the formation of individual style of professional activity, selecting the individual educational and professional route.

Innovation Project “Scientific Search”

The aims of the project are comprehensively promote the professional competence of staff of the college, conducting experimental research work to develop psycho-pedagogical and methodological guidelines for training and education of gifted students, the use of modern textbooks and copyright methodological improvements for the development of students’ abilities.

The task of the project is forming a teaching staff of the college readiness for the introduction of modern educational technology innovation, mastery of methods of scientific inquiry.

The ways of project implementation are diagnosis of professional teaching staff, creating models of methodical work with groups of teachers at various levels, implementation of the pedagogy of cooperation and co-creation on the basis of nature conformity and tolerance.

Innovation Project “Spirituality”

The aim of the project is formation of high spirituality, initiation to the system of universal moral values.

The tasks of the project are an establishment of a system of education free individual in harmony with tolerance and humanistic education, ability to communicate. And also have a means of self-esteem, assertiveness human aesthetic taste, cultural ownership means to protect you against injustice.

The ways of project implementation are working and extensive testing of variable program on the formation of spiritual and moral qualities of the individual, preparation and trainings of formation of spiritual personality traits, dissemination of student cultural events aimed at building a tolerant person.

Innovation project “Health”

The aims of the project are improving physical, mental health, psychological comfort and welfare of students by prioritizing a healthy lifestyle as a major factor in recovery, its preservation and strengthening, approval conscious public attitudes to health, education of the individual, able to support and maintain their health by making positive change in attitude and behavior.

The tasks of the project are creation an integrated system of formation of positive motivation for a healthy lifestyle of students, the use of basic knowledge of the subjects, scientific, empirical knowledge and practical skills in order to create value orientations of young people on healthy lifestyles, implementation of individually oriented method of forming students' healthy lifestyles in the educational process. Also it is ability to make better administration decisions to preserve and strengthen own health in a variety of situations, including extreme; improve forms and methods of forming the foundations of a healthy lifestyle. The next tasks are formation of students' negative attitudes to bad habits, increased efficiency mechanisms to overcome dependence on them on the basis of human moral and spiritual values, providing quality training and retraining of personnel able to generate positive motivation of young people to a healthy lifestyle, determining priority of forming positive motivation for healthy lifestyle to work with parents and community, creating scientific information space for preservation and promotion of health of students.

The ways of implementation of this project are study of national standards of the educational materials aimed at building healthy lifestyles, system monitoring of the health of students, teaching staff of the college. The other ways are development and extensive testing programs for variant formation practice healthy living habits, preparation and publication of textbooks, video and audio products, electronic educational materials, etc., dissemination of cultural and sporting actions for young people aimed at promoting healthy lifestyles, culture, health, forming the economic basis for a healthy lifestyle, creating the proper material and technical base.

Innovation Project “Society”

The aim of the project is promoting social inteorization of students, adaptive joining the surrounding society.

The tasks of the project are direction of educational work to overcome negative life orientation, creating favorable conditions for cooperation of teachers, students and parents, formation of students’ conscious discipline.

The ways of implementation of this project are development of social passport college, conducting sociometric studies, involving students in socially useful labor and educational activities.

Introduction a matrix administration structure in Stakhanov pedagogical college caused a change in the planning work. Created “bank” of complex-targeted projects provided their relationship at all stages of development. This ensures inter-cooperation that led to poliproject effect.

This is, firstly, the effect of cooperation was achieved by means of appropriate allocation of resources between target projects, sharing of computer technology, the spread of innovation for individual projects earmarked for the benefit of other projects, accelerating and improving the quality of education and economic training of students, reducing through joint implementation of complex cases time and labor costs.

Secondly, it is provided the effect of typing by applying the results obtained in the implementation of some complex-targeted projects. Decreasing overlap and duplication. Joint development of leaders of their complex-targeted projects to clearly define their goals and objectives and are responsible for their conduct. Herewith every manager makes the task associated with the preparation for the implementation of projects, and in addition, specifically defines the content and timing of internal control.

Thirdly, the effect of allowing coordination helps to prevent loss of the inconsistent performance of interdependent activities of complex-targeted projects. This is achieved by mutual information, coordination and interconnection of performers. As a result of the creation of bank of interrelated complex-full projects

and their implementation using the maximum potential of the college and performed its development. Cause changes in planning causing the introduction of new forms of organization activities of faculty members. First of all, it should be noted conducting educational councils in the form of organizational -activity games, conferences, round table. These councils provide educational inclusion in the decision making process of most teachers who make more effective their implementation. Workshops by working group were implemented for projects and subject-cyclic commissions. Add to this that the analytic activity of administration subject (deputy director, project managers, and teachers) becomes more productive.

The process of change is not possible without the joint efforts as the head of the leader of the project ensures the effectiveness of the educational process through the activities of the team. The team of associates gathered together for a common goal is the most open and flexible group, and therefore more capable to anticipate changes and react to them, and solve problems and to solve tasks in accordance with changing conditions.

It is important to note that during the doing the task, project directors used motivational and stimulating effect on the members of his team avoiding administrative tools that enhances the conscious responsibility of teachers, forming partnerships in the group and create a healthy competitive team.

It is important to note that the performance of tasks, project managers apply motivational and stimulating effect on the members of his team, avoiding administrative levers that promotes conscious responsibility of teachers, the formation of partnerships in the group and a healthy competitive team.

Team members – are teachers, students, parents and employees of other companies interested in the project. They administer the execution of specific project activities and the program as a whole. Team members independently decide on the content of a particular task or event.

Collection and processing of information on the status of implementation of development programs provide special information and analytical service. Composition of the service is determined by the head of the college from among

college administration and teachers that can for analysis and forecasting. Duties of information service determined content of a particular activity. Objective of information and analytical services should focus on analyzing the effectiveness of pedagogical college activity, organizing marketing activities of the university, affiliated with the environment.

Applying a matrix administration structure and involving certain activities of teachers to administration, it is crucial to emphasize that managers in an educational institutions is not only formal leaders, but all team members, as a man – a system that self-developing, which is why every member of the team at the same time there are self-governing. Administration and government are the only process that also lead to the development team, and consequently to human development and personality.

The delegation of administrative authority to faculty, providing management functions require presence of such properties manager: situational, constant awareness of the state of affairs at all levels of management, the ability to make decisions and take responsibility for the common cause in unusual and extreme situations, high creativity, prospects thinking, entrepreneurship, and personal integrity.

Thus, on the evaluation of the teacher as a manager affect:

- Ability, inability to perform administrative functions - to make decisions, to plan joint activities, engage, organize relations team members, monitor their activities;

- Match-mismatch position, embracing - the quality of professional work, the prospect of career development;

- The level of reflective skills – flexibility, mobility thinking, systematic mind.

This growth of requirements for teachers in connection with the expansion of its functions requires focused pedagogical college's staff to new forms of cooperation to implement their own development strategies on a scientific basis.

Introducing the matrix administration structure should be noted that it is built on the principle of double subordination performers. On the one hand, to the immediate supervisor of the functional unit, the other – to the project manager, who

has the necessary authority and is responsible for time, quality and resources. Project director, in turn, interacts with two groups of subordinates: the employees of its functional units and members of the project team who obey him temporarily and for a limited number of questions (and kept their subordinate supervisor units, departments, services). This dual reporting requires new understanding of the interaction of the organization from managers and teachers.

Formation of the matrix structure is accompanied by extensive network of horizontal links, numerous intersections with the vertical hierarchy formed by the interaction with project managers and functional heads of linear units. Therefore, special attention needs to establish relationships between managers, exercising administration departments and managers who control the execution of the project; the allocation of rights and responsibilities under these conditions requires the maintenance of a balance between two organizational alternatives – vertical and horizontal.

Thus it is evident that the main principle of matrix approach to building organizational administration structure is not improving activities of individual structural units and improve their cooperation in order to implement a particular project, an effective solution to the problem in the whole development program of pedagogical college.

Summary of administration practices for the transition to the new organizational administration structure allows to conclude that the matrix administration structure of the development of pedagogical college allows: reduce the number of levels of management, which allows to speed up the time flow of information from administration across functional departments to direct performers – teachers, clearly distinguish the components part of the administration structure , to provide a rapid response to changes in the pedagogical college, and in the environment. Also to provide authority for resolving issues in each case a team of associates who have the most information on these issues and to ensure decentralization of administration to delegate responsibility to a lower structural level, to provide leadership on the basis of cooperation, to create opportunities for

growth, self-actualization and self-development of each teacher. And to build open communication between employees, built on trust and mutual assistance, which made it possible to constructively resolve conflict, engage each instructor to determine objectives and decision-making gives teachers the opportunity to feel involvement in the planning and administration of change; introduce innovative designs of the pedagogical college.

Thus, based matrix administration structure of development of pedagogical college opens a new direction in the development of most active, most dynamic and most program-targeted organizational forms of administration that focus on the rise of the creative initiative of managers and professionals and identify opportunities for significantly improving the of effectiveness an educational institution.

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Горобець Д. В.

Впровадження матричної структури управління як умова розвитку педагогічного коледжу

У статті порушено проблему розвитку педагогічного коледжу за умов модернізації організаційної структури управління, розкрито сутність матричної структури управління, принципи її побудови, особливості впровадження в педагогічному коледжі, висвітлені основні характеристики інноваційних проектів.

Ключові слова: матрична структура управління, інноваційний проект, вертикальні та горизонтальні зв'язки, принципи управління, управління розвитком.

Горобець Д. В.

Внедрение матричной структуры управления как условие развития педагогического колледжа

В статье поднимается проблема развития педагогического колледжа за счет модернизации структуры управления, раскрыта сущность матричной структуры управления, принципы ее построения, особенности внедрения в педагогическом колледже, освещены основные характеристики инновационных проектов.

Ключевые слова: матричная структура управления, инновационный проект, вертикальные и горизонтальные связи, принципы управления, управление развитием.

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