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THEORETICAL ASPECTS OF INNOVATIVE PROJECT ACTIVITY

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INTRODUCTION

The concept “quality of education” has become a key one as it determines the vector of development of education in the modern world. One thing is for sure, the whole education strategy is based on this concept: both the position of the domestic education system on the international stage and the performance of education institutions and the evaluation of funds invested in education. If we want our school provides quality education, it is essential to reach an understanding: how today to integrate traditional approaches to education with modern information technologies, ideas about the further development of education under international quality assessment systems. “It is quite obvious that mankind evolution is becoming increasingly dynamic. The fact is proved by the analysis of any sphere of public life. The change of ideas, knowledge happens faster than the change in human generation. And it means that it is impossible to provide a person with a traditional education for the life term not only in a good school but also in the best university”, the President of APS of Ukraine V. Kremen wrote in 2006. What is to be done? The substantive answer to this question is indicated in the Law of Ukraine “On the Basic Principles for the Development of an Information-Oriented Society in Ukraine for 2007–2015”: “One of Ukraine’s top priorities is the striving to build a people-oriented, open to all and development-oriented information society where everyone could create and collect information and knowledge, have free access, use and share it to enable everyone fully realize own potential contributing to social and personal development and improvement of the quality of life”. Further, it is stated that today there are all “... reasons to believe that the domestic market of ICT is in a state of active formation and, under certain conditions, may become the basis for the development of the information society in Ukraine”.

Education policy is a socially-oriented direction of the life of the population, which has to fulfill its needs to obtain the necessary knowledge, skills and abilities freely and use them to support their life activity worthily. The main task of the state's education policy is to create that sort of education system that would harmonically dovetail with the international education system and form a well-developed personality.

The social need drives the modern school, its teachers, to new pedagogical ideas and technologies, the dissemination and introduction of advanced pedagogical experience. At the same time, it should be noted that the reform of education will reach its goal only when the modernization of education gathers features of an evolutionary-prognostic process. The education innovation activity is the way to achieve a more effective development of our society.

In modern education, innovations are becoming more widespread. In fact, innovations are intended to harmonize relations in the educational process, to bring its results in line with the requirements of society and individual human needs, to solve the problems of forming a socially useful and successful personality.

Innovation management in modern school is a complex multifunctional activity, which is influenced by many problems that accumulated in the education environment in the last century: poverty of physical and information resources, inertia, and lack of qualified pedagogical and managerial staff.

The use of ICT is one of the most important courses of development of information society. Informatization is a necessary component and condition of the general *modernization* of education, renewal of the content and forms of educational activity, education management. In this context, the school should develop new skills of students: to adapt and find their mission in the life, the ability to collect information independently, to analyze, summarize and pass it along to other people, to embrace new technologies. An adequate response to the challenges of time is the implementation of a new model of teaching and learning process focused on the independent work of students, group mode of study, the formation of necessary skills. The active use of information and communication technologies (ICT) in the teaching and learning process can and has to play a significant role in this transformation.

1. Innovative education project

An innovative project is a conceptual program document of the complex of social and pedagogical projecting of innovative development of education. The socio-pedagogical project is presented as an innovative form of organization of the educational environment based on the complex nature of the activity of the temporary team of experts, which takes place in the conditions of active interaction with the environment aimed at fulfilling a specifically reasonable goal and a specific outcome (changes), an action plan, and limited by a particular time term and physical-financial resources.

According to a relevant interpretation of the "project" as a socio-pedagogical category, which requires a comprehensive approach in achieving certain results (changes), the issue of project management at different levels of the educational hierarchy needs an individual analysis. Under such conditions, the author considers the education project management system as a kind of structure (or ideal model), which reflects the priority areas, characteristics of the future management system.

In Ukrainian pedagogical practice, the project became a widespread form of organization of an innovative environment in the last decade. However, domestic experience gained in project activity has not become the subject of study and generalization at the scientific and theoretical level. Some issues of project management were covered in professional editions, Ukrainian periodicals. Among fundamental papers, a study guide of I. Pidlasyi deserves special attention; it focuses on the subject of pedagogical diagnostics, methods of logical analysis and expert evaluation of teacher's activity, prediction of its consequences. However, the concept "pedagogical project" is not developed in the paper of the scholar but only mentioned in the context of the need for its expert examination "at the stage of design" and diagnosis "when it refers to the real process".

Projects are a hands-on example of a project form of organization of education environment. The form of the project makes it possible, following each idea, to develop a modem concept whose integrity was provided by statistics on the state of regional education, to justify the target prospects, to determine the range of measures needed to achieve the goal.

Taking into account the latest approaches in the practice of project activity, it is necessary to consider education project management as the development (designing) of an ideal model of the management system where its priority areas (or main characteristics) are concentrated. The following advantages, which have been proven its capabilities, support that sort of approach: to respond to environmental changes (advancements in information technology, orientation on subject-object interactions in the education process, ideological changes in society as a need to review the content-related component of learning, etc.) flexibly; to focus efforts of professionally active experts in different branches of scientific and practical knowledge for simultaneous "breakthrough" (achievement of optimal results) in several priority areas; raising personal responsibility of each member of the temporary team for the results achieved; attraction and distribution of the physical and financial resources directly in the implementation of an individual project.

Arrangement of innovative projects management creates comfortable conditions for joint productive activity of different experts. Therefore, it is especially important to focus on such a management system which would take into account not only individual factors (financial, physical, information, human) but also their integrative interaction.

In our country, project management became widely used in the sixties and was called a network system of planning and control. The fact is that project management methods are based on the presentation of a project in the form of a network diagram which shows a link between different activities (operations) of the project.

In the seventies, the interest in networking methods of planning and management declined as the causes of the low efficiency of many projects are deeper – in the foundations of the socio-political and economic mechanism of the state.

Nowadays, great attention is paid to the management of innovative education projects. Many academic projects are introduced in education institutions. But despite the abovementioned facts, most projects are often implemented in a wide range of industries based exclusively on the experience of those people who are responsible for the project. The situation worsens when one has to work on several large-scale projects at the same time, 4 or even one but very complex, that is important for the further functioning of the education institution. In such a case, it is

necessary to use an innovative project management system based on optimization models for the best distribution of resources (financial and physical) both between several projects and within one project.

Innovative project management is the art of managing and coordinating labor, physical and other resources throughout the lifecycle of a project by applying systems of modern management techniques and methods to achieve the results defined in the project in terms of structure and scope of work, cost, time, quality of the project. Using control technology of innovative education projects, many techniques and principles have been developed to assist project managers.

At the same time, new problems appeared in the last decade due to the need in involving academic teams of education institutions in active innovative activity. Thus, the study of experience in implementing innovative projects in schools revealed the following problems:

– a poor account of the specifics of a particular school, special aspects of its experience, problems, resources.

– Forced implementation of an innovative project, the tendency to get faster growth of indicators from the renewed areas of work.

– Lack of focus on the outcome (the project is implemented "for the sake of the project", for the "innovation" report).

– Sub-optimal distribution of work among project participants.

– Lack or low quality of expertise of the innovative project.

– Excessive strict managing, or vice versa, the administration is disengaged from project management limiting by pro forma control of the outcome.

– Lack of a unified system of organizational-management activity in the process of preparing, testing and consolidating innovations in the operation of a school.

Leading experts in education system management mark the following stages of the development and implementation of the innovative project:

1) substantiation and advancement of innovative ideas;
2) development of an innovative project;
3) appraisal of the innovative project;
4) local implementation of innovative ideas (their experimental testing);
5) control of innovation;
6) analysis of control results;

7) updates;
8) amplification and improvement of innovative experience;
9) the transition of innovation to the category of traditions.

It is determined the sequence of organizational stages of innovation activity. Moreover, in the process of development and implementation of innovation, there is a need to make managerial decisions on the prolongation or termination of work, on its regulation and update. Managerial decisions are made based on reliable and complete information – they allow regulating the innovation process preserving its integrity and purposefulness, stimulating the most successful and up-to-date innovations and timely stopping the development of ineffective, unpromising ideas, which are unfeasible in this school by this group of innovators.

Participation in the innovative project management of all its subjects allows carrying out adaptive management of innovations ordering the activity of participants of the innovation process. In case of that kind of organization of innovation activities, the introduction of the new takes place as a process of change of formal and informal structures.

2. Control technology of innovative education project

The innovative education project is a cycle of scientific, teaching and other activities which is purposely designed to solve a specific problem in the education system with a planned time-table for implementation, requirements for results, relevant resources and specifics of its organization.

The education system is a set of factors specially created for the realization of educational functions. The problem specified in the project is a contradictory situation in a specific component of the education system. The overall objective of the project is to amend a relevant component of the education system that results in the elimination of a certain contradiction. The components of the overall objective of the project are tasks, and the result of the project is a product (training programs, study guides, academic, methodical, information resources, etc.) or a service (training, resource support) that provides a solution to a defined problem in the education system and determination of the conditions for effective use of such a product (service) and its implementation in the education system.

In terms of duration, an innovative project can be short-term (up to two years, medium-term (from two to five years), long-term (more than five years).

The principal stages of the implementation of an innovative education project are as follows:

preparatory (organizational measures and development of a complex of guides (scientific, methodological, experimental, diagnostic, etc.) for the realization of a conceptual model of the project (hereinafter referred to as conceptual model);

technological (implementation of the conceptual model, control over the implementation of Project program, generation of intermediate results, their update (if necessary), the achievement of the results following the overall objective of the Project);

summing up (generalization, systematization, evaluation and approval of the results of the Project).

Project team establishes interim (additional) stages of the project.

The project initiator is a legal entity that submits the project proposal to the project management board and is responsible for the implementation of the Program under the project order. The initiator may be presented by an education institution regardless the type, level of accreditation and affiliation, scientific, scientific-methodological or methodological institution, R&D enterprise, the institution of postgraduate pedagogical education, state education management bodies. The project management body may be represented by authorized state education management body (or other executive authority) which gives consent to involve an education institution (establishment, organization) in the project base, agrees terms and conditions under which education institutions (establishments, organizations) are involved in the project base (legal, organizational, financial) with head of education institutions (establishment, organization) and the initiator, controls the impact of the project on the educational process following the powers defined by the current legislation.

The project management body is an authorized state education management body that decides on the implementation of the Project.

If an initiator is a state agency of education management, the decision on the project implementation is rendered by its collegial body. Project management board admits letters and documents regarding the development, organisation and implementation of the project (proposals,

reports, detailed plans, complaints etc.) for examination from project participants, education institutions (establishments, organizations) and the public and facilitates to the achievement of an overall objective.

To organize the evaluation (expert examination) of the document regulating the development and implementation of the project, the initiator, project management body define: purpose and characteristics of document evaluation, method of organization of document evaluation (involvement of independent experts, relevant scientific, research, scientific-methodological and methodological institutions and organizations, educational establishments, etc.; individual or group discussions, meetings; presentations or competition; presentation of the document for public discussion; creation of expert group, commission), the conditions of performance of document evaluation and the requirements for its results. The complex conclusion on the document includes general evaluation of the document, justification of conclusions, requirements and recommendations for improvement of the document and determination of further actions according to the content and conclusions.

The relations between the project participants are regulated based on concluded agreements and the current legislation and come into force from the date of issuing the order on project implementation. Professional personnel are a specially created team for the development of the conceptual model, the Program and the implementation of stages of the innovative project, the working group and the responsible persons. Employees of different organisations and other physical persons are included in the professional personnel under the terms of mutual agreements. The working party may involve research supervisor(s) of the project, coordinator(s), and other responsible persons (if necessary).

The project coordinator or another person responsible for the scientific level and performance may be a scientific supervisor of an innovative education project. Coordinator of the project may be presented by the research supervisor of the project or another person who is responsible for the organisation of Program implementation.

The base of the innovation project is the institution (establishment, organization) or their branches providing the research object(s) and (or) appropriate resources (human, information, physical, etc.) to implement the project stages. An education institution, establishment, organization

of the education system, organization of another branch may be a participant of the project base regardless of the type of legal entity.

Confirmation of the consent to engage the above education institutions (establishments, organizations) in the project base is the corresponding letter to the initiator from the body (bodies) managing the project base (in the form specified by the initiator) to which the decision of the collegiate body of the education institution (establishment, organization) on participation in the project is attached. In the process of the implementation of the education project, the Initiator can make changes in the body and conditions of the functioning of project base, and working group or project management body (bodies) can initiate them by submitting a substantiated proposal to the Initiator, who decides on amendments to the body and conditions of the functioning of the project base.

Participation in the project does not change the subordination, type, level of accreditation, organizational and entity form of the education institution. The reason for initiating the project is the defined problem in a specific component of the education system, the availability of a conceptual model of the relevant project and the decision of the collegial body of the Initiator.

The specification of a conceptual model includes:

– full name (topic) of the project;

– problem statement and substantiation of its relevance;

– overall purpose, objectives and expected results of the project;

– theoretical and methodological regulations on the implementation of the project objectives (source base; description of the structure of organization, content, methods and means of activity stages, the value of the expected results (theoretical, practical, innovative), functions of staff, project base, etc.);

– description of the criterion apparatus for project effectiveness (methodological approaches to performance evaluation, quality indicators of results, qualimetric tools, etc.);

– description of the possible negative consequences of the project implementation and ways of their elimination;

– other components of the conceptual model, which are defined by the supervisor(s).

The program reflects the overall plan for the implementation of its conceptual model and contains:

– overall purpose and results of the project;

– the purpose, objectives, expected results and timing for each stage of the project;

– a list of didactic tools, training facilities, other materials and resources that are essential for the implementation of the tasks of a particular stage of the project.

A comprehensive plan for the project phase is drawn up in accordance with the Program and reflects the progress and logic of tasks execution, use of resource and cost. The comprehensive plan is also supplemented by plans of research and projects for the period of stage implementation, list of education institutions (establishments, organisations) which compose the base of the project stage and confirmation of the consent to their participation. During the consideration of proposals, the following should be evaluated: relevancy of the defined problem, correspondence of the conceptual model, compliance of the Program with its overall purpose, scientific and human potential of the project, expediency of the functions of project base, use of didactic tools, training facilities, other materials in teaching and educational process (availability of expert results, the relevant stamp of the Ministry), motivational factors of activity of project participants, balance of positive and negative impacts of project results in the education system, efficiency of resources consumption (financial, physical, human resources, etc.), compliance with the current legislation and public norms. When considering the comprehensive plan of the project stage, it is necessary to evaluate: the correspondence of the objectives of the stage to the overall purpose and objectives and scientific and human potential of the stage, the expediency of the basis for the project execution, compliance of the sequence and content of the tasks and activities of the stage with a logic for achieving a goal of the stage, the optimality of the plan of resources, evaluation criteria the quality of the results, other parameters of the comprehensive plan of the stage defined by the project management body.

During the consideration of the report on the results of each stage of the project (according to the comprehensive plan of a relevant stage), the following are evaluated: completeness of the tasks execution of the stage and achievement of the goal of the stage, quality of the achieved results of the stage, adherence to the plan of expenditure of resources (financial,

physical, personnel, etc.), other parameters of the report specified by the project management body, comprehensive plan of the next stage.

The complex conclusion of the report(s) on the results of each stage(s) of the project includes:

- generalized evaluation of the report;
- justification of the conclusion;
- conclusion.

Depending on the outcome of the evaluation of report(s) on the results of the stage (s) and comprehensive plan (s) of the next stage (s), the project management body provides the initiator with a comprehensive conclusion or decides and issues an executive document to approve the results of that stage (s) and confirm the next stage (s) of the project. Based on a relevant comprehensive conclusion about the report on the results of the last stage, the project management body issues a regulatory document approving the results of the last stage and compiling the final report (within the specified deadlines).

All rights of ownership of research and development information, innovative product and other particular results of the project are originated, realized, conveyed and protected under the current legislation. During the consideration of the final report, the following are evaluated: completeness of the tasks and achievement of the common goal, quality of the obtained results, adherence to the plan of expenditures of resources (financial, physical, human, etc.).

Based on a comprehensive conclusion on the final report, the project management body makes the decision on the project finish and issues an order which determines the basis for the decision to complete the work, provides an assessment of the work of the project participants, determines the follow-up activity on the results and measures (promulgation, presentation, dissemination etc. of project results, measures of encouragement (collection) for participants of the project, start of a new project, etc.).

CONCLUSIONS

In our country, project management became widely used in the sixties and was called a network system of planning. The fact is that the basis of project management methods is the presentation of the project in the form of a network diagram that reflects the relationship between the various activities (operations) of the project.

In the seventies, interest in networking methods of planning and management declined as the reasons for the low efficiency of many projects are deeper – in the foundations of the socio-political and economic structure of the state. But despite the abovementioned facts, most projects are often implemented in a wide range of industries based exclusively on the experience of those people who are responsible for the project. The situation worsens when one has to work on several large-scale projects at the same time, 4 or even one but very complex, that is important for the further functioning of the education institution. In such a case, it is necessary to use an innovative project management system based on optimization models for the best distribution of resources (financial and physical) both between several projects and within one project.

Based on the previous definitions, one can assert that an innovative project is a system of activities, which are interdependent and interrelated in the context of resources, timing and executors aimed at achieving specific goals (objectives) in the priority areas of the development of education and science.

The level of significance of the project determines the complexity, duration, team of contractors, scale, nature of promotion of the results of the innovation process that affects the content of project management.

SUMMARY

In modern education, innovations have become more widespread. In fact, innovations are designed to harmonize relations in the educational process, to bring its results in line with the requirements of society and individual human needs, to solve the problems of forming a socially useful and successful person.

In modern school, innovations management is a complex multifunctional activity, which is influenced by many problems that accumulated in the educational environment in the last century: poverty of physical and information resources, inertia, lack of qualified pedagogical and managerial staff.

Innovation management in modern school is a complex multifunctional activity, which is influenced by many problems that have accumulated in the education environment in the last century: poverty of physical and information resources, inertia, and lack of qualified pedagogical and managerial staff.

The use of ICT is one of the most important courses of development of information society. Informatization is a necessary component and condition of the general *modernization* of education, renewal of the content and forms of educational activity, education management. In this context, the school should develop new skills of students: to adapt and find their mission in the life, the ability to collect information independently, to analyze, summarize and pass it along to other people, to embrace new technologies. An adequate response to the challenges of time is the implementation of a new model of teaching and learning process focused on the independent work of students, group mode of study, the formation of necessary skills. The active use of information and communication technologies (ICT) in the teaching and learning process can and has to play a significant role in this transformation.

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