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CONTENTS

Economics

- Oleh Dudkin.** Methodological approaches and main factors for the establishment of strategic oil and gas stockpiles of national economy5
- Iryna Markina, Dmytro Diachkov.** Information security audit specificity13
- Nataliia Ivanova, Tetyana Kuznetsova, Irina Khoma.** Market aspects of higher education21
- Larisa Lutay, Nataliia Zahorodnia.** Organizational mechanism of management of the labor market31
- Olga Salimon, Kateryna Kompanets.** Implementation of interactive - marketing in hotel business39
- Alla Slavkova, Kostyantyn Shevchuk.** The role of taxation in the formation of individual investment strategies in the Ukrainian financial services market46
- Brigitta Szoke, Istvan Mack.** Managing the 2008-2009 crisis by 2014 in the countries of the visegrád four53

Pedagogy and psychology

- Vladimir Babienko, Yevhen Koboliev, Snizhana Hanykina, Yuliia Asieieva, Viktoriia Storozh.** Use of quest technology in educational process of higher education67
- Sergiy Voskoboinicov, Sergiy Melnyk, Dmytro Stupak, Vitaliy Rikun.** Creation and use of training platforms of delay access and information contents for management of scientific-pedagogical activity of distance education in higher education75
- Yana Datsenko.** Features of the influence of the macro environment on the writer's orientation of hryhir tyutyunnyk (based on the writer`s megatext)83
- Olena Dyba.** Using of electronic days of practice with google tables at the higher education institutions90
- Oleksandr Khomenko.** Methodological background of professional linguodidactics in Ukraine99

PEDAGOGY AND PSYCHOLOGY

USE OF QUEST TECHNOLOGY IN EDUCATIONAL PROCESS OF HIGHER EDUCATION

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***Annotation.** The article reviews methodology and organizational - pedagogical terms of quest –technologies applications in the college context. Basic attention is spared to the features of construction and possibilities of the use of educational quests during organization of students' studies. The flowsheet of educational quest, its types and algorithm, structural components of quest – technologies is described.*

***Key words:** technology, quest-project activity, quest-technology, interactiveness, integration, application.*

Target setting. Educational reforms get through in Ukraine now. They are designed to improve education, in particular, to improve the innovative activities of higher education institutions. According to normative documents today, a policy of accelerated, forward-looking, innovative development of education and science should take place in the country. Modern personality must be provided with conditions for development, self-affirmation, self-realization throughout life and the education system should ensure the formation of a holistic scientific picture of the world, modern world outlook, creative abilities and the ability to independent scientific knowledge, self-education and self-realization of the person capable of creative work, professional development, development and introduction of modern technologies, mobility and competitiveness in the labor market.

State educational standards are realized in the system of education, with system active approach is of top priority in combination with other modern approaches in education (personality-oriented, culturological, etc.). A mission of modern higher education is creation of conditions, that assist to personality development and successful socialization of students, their mastering ability to study and live deservingly, morally, and realize oneself in creative, professional activity. Among requirements to the educational process organizational terms it is possible to distinguish updating of maintenance and modernisation of educational technologies, that it is determined by the modern sociocultural terms of society.

Thus, one of the urgent problems of the educational space is the diversification of

the educational process, the introduction of the newest forms, methods and technologies of teaching, the development of innovation activities.

Analysis of the recent researches and publications. According to many scientists (O. Baguzina, Ya. Bykhovsky, S. Napalkov, etc.), one of the modern innovative technologies that needs to be implemented in the educational process for the comprehensive development of youth of the 21st century is quest-technology. The quest-technologies use is highlighted in a great number of theoretical and empiric researches. The lessons at primary schools [5], vocational training colleges [8], institutions of higher professional education [2, 9] are their subjects. Quest-project activity within the framework of educational establishment has special value [7] as it brings up the personal responsibility; forms the culture of interpersonality relations and tolerance; aspiring is to self-realization and self-perfection. I. M. Sokol offers the detailed classification of educational quests [11], A. F. Levitskaya and H. B. Mykolaieva examined psychological and social-pedagogical aspects of quests application in educational activity [10]. In foreign researches, in particular in the works of Kaivola T., Salomaki T., Taina J. [12] application of quests is analysed, their possibilities for the students of institutions of higher learning. For understanding of quests' specific pedagogical influence, the modern researches appeared in pedagogics on the whole and pedagogical technologies, in particular. Thus, the works of B. I. Zagviazinsky, B. P. Bepalko determine pedagogical technology as rich in content technique of educational process.

The analysis of psycho-pedagogical literature devoted to the problems of application of modern educational technologies allowed us to define their basic descriptions. They are reference-point on the achievement of high educational results, development of reflection and critical thinking; transition from reproductive character to the problem of studies and organization of active cognitive activity of students with support on the their personal experience; integrated character; account in realization of technologies of all types of knowledge (informative, procedural, evaluation and reflective) and them structural components; account of individual educational necessities and capabilities of students, level of their development and health; creation of comfort terms is for opening, realization and development of personality potential of students; assistance to creation of situation of success, as a subjective residence by a human his personal achievements in the context of one's life and individual development; interactiveness and dialogies, motivation to collaboration, joint activity of all subjects of studies; creation of educational products as results of activity of students, maintenance of that answers the investigated object or to educational industry; applications of informative educational resources and electronic media.

Pedagogical arsenal of technologies in domestic and foreign pedagogics that answers the requirements listed above, is large enough, among them are technologies of educational-research and project activity, studies on the basis of social co-operation, development of the critical thinking, problem studies, educational questions, on-line learning, etc.

The processes of globalization and rapid development of technologies radically

changed all spheres of vital functions, including higher education. Competition calls arise up before the system of higher education in the entire countries of the world. Higher education tests permanent transformations for support of ability adequately to answer upon requests of modern society. In particular, maintenance and design of educational space change. "Taking into account the state of world economy, a better formed generation is now needed exactly, than ever before, in the widest and deepest sense of this word" [1].

Raising of the task. New requirements to higher education assume the changes of educational space. These changes touch the objectives and maintenance of education, methods and technologies used. The mass open on-line courses are actively inculcated, as well as interactive technologies, individual trajectories of studies, etc. The participants of educational process are substantially change, too. The generation of young people, coming to the universities today is fundamentally other.

So, a research problem consists in the necessity of new creative educational technologies that, simultaneously will answer the requirements of changeable society, the queries of subjects of educational process, first of all, students of new generation. New interactive methods and forms, creative educational technologies that provide speed of transformations and answer upon the requests of modern and future society, are needed

That is, technologies, that allow to train persons capable under the conditions of global competition to design new types of activity, convert social environment, decide the actual tasks of today's practice and possible problems of the future.

Wording of the research basic material. The new system of education must not only form the certain set of professional integrities in students but also wake up their aspiring to the self-education, realization of their capabilities. One of the major directions of efficiency and quality of specialists training increase is mastering and expansion of forms and methods of interactive studies application. Simple exposition of material by a teacher is a monologue, and for today to take a student with educational process, bring over all educational group to work – is possible only with the use of creative technologies. Among modern technologies with such a potential, we distinguish exactly "quest", that is a new technology of interactive studies that assists activation of interest to learning. This technology can be considered a project-oriented, because during the work upon it, the number of professional integrities develops: the use of information technologies for the decision of professional tasks (students design educational material as presentations, web - sites, flash – reelers, database, etc.); team – work (a close contact is during all quest); skill of public performances (the students acquire it in the process of public defense of the mini-projects prepared) [11].

Considering that "quests" are new in education, first of all, let's consider their characteristics in the aspect of pedagogical innovations, the innovative activity of the teacher of institutions of higher learning. The study of scientific works on the problems of pedagogical innovation (O. Dubasenyuk, et al.) allows us to insist that innovation is a fundamentally new form: a new idea, principle, form, content, structure, etc., which

substantially changes the existing practice. Innovation is something introduced to this system from another or that was first invented. Innovation in education is the process of creating, introducing and disseminating new ideas, tools, pedagogical and managerial technologies in educational practice, as a result of which the indicators (levels) of the achievements of the structural components of education increase, the transition of the system to a qualitatively different state occurs. Essential feature of innovations is their ability to influence upon the general level of teachers' professional activity, expand the innovative field of educational environment in an educational institution.

Therefore, considering the quest as a pedagogical innovation, we must investigate its impact on the educational process, the student's learning and development (in the context of effective changes), as well as pedagogical activity, requirements for the teacher.

Actuality of quests' use is realized by all participants of educational process. A new generation requires the use in the educational process of technologies of strenuous type. It is known that modern students better master knowledge in the process of the independent getting and systematization of new information. The use of quests assists education and development of personality's qualities responding to the request of informative society, opening of capabilities and support of giftedness.

Quests application develops ability to work with information, choose most meaningful, lay out it in one's own words. Work in this searching technology is the interactive form of realization of studies, that allows to satisfy the requirements of the State educational standards of the third generation. Such quests are developed for educational subjects on the different levels of studies in educational process. They embrace a separate problem, content area, theme and can be cross-curriculum.

Just the definition of the quest as a special technology, in our opinion, is the most correct, it does not contradict the logic of scientific knowledge and allows to reveal its essential features. Thus, technology (from the Greek *techne* – skill, art; *logos* – knowledge, doctrine) is a collection of methods, means and realization of people of a specific complex process by dividing it into a system of successive interrelated procedures and operations that are executed more or less unambiguously and aim at achieving a high performance of a particular type of activity.

Quest as a pedagogical technology is a model of joint pedagogical activity in designing, organizing and conducting a learning process with well-defined goals, diagnostics of current and final results, which has certain stages with distinct procedural characteristics.

The following types of quests are identified: for a short-term work (the aim: deepening of knowledge and their integration, designed for one-two class exercises); for a prolonged work (the aim: deepening and transformations of students' knowledge, rated at a long-time period, a term, e.g., or an entire training course). The themes must be interesting and useful for students, that everybody could work, realizing the necessity of the problem set up decision. Students' research abilities are formed at this stage of a task performance.

Discussion of the quests work results can be held in the form of a conference, so

that the students have an opportunity to show their job, realizing its significance. Such personal trait as responsibility for the work done, self-criticism, mutual hand-holding and art of public presentations are enshrined at this stage.

Quests-work can be offered as an extracurricular independent task for students. It can be conducted in a study group during coupled classes, which can significantly increase the motivation of students to achieve the best educational results. If the quest is carried out in mixed teams from different training groups, then this team needs initially teambuilding, interaction and cohesiveness exercises to be done that increase the overall results of creative activity.

Quest as a creative pedagogical technology can be used in various aspects: as a form of class conducting it allows students to creatively interact with each other, as an element of control and evaluation tools it allows to check the level of competence.

This form of work allows us to combine scientific, analytical, creative, and design thinking. Another important value of quests is the ability to use interdisciplinarity. When solving problems during the quest, all participants have to actively interact with each other, use the most diverse skills and abilities, life experience, intuition.

Quest's essence is that its participants (students) must solve a problem that has no definite solution, and the sources of information provided are selected in such a way that the problem is considered from different angles, with the information in the provided sources does not give an accurate answer to the question. Quest's participants must take from all the proposed variety of text, graphics and video materials necessary information and formulate their own conclusion.

As a limitation to the use of this method, one can mention the lack of specially equipped premises for implementation, the framework of educational programs, traditional forms of classes (lectures, seminars and practicals), the breakdown between teachers' values and those of the students'.

During the observation of students' work in creative groups, it has been established that quests have a high resource potential and are the most promising creative pedagogical technology for the professions of the future preparing.

Quest technology has an integrated character: quest's algorithm is based in the logic of problem learning – from the problem setting to the ways of its solution, representation of the result and reflection, aimed to the development of a student as an active subject of life. Educational "products" performed individually or in a group as a result of quest can be different. The problem set may be solved in different forms, starting from answers to the questions to the created multimedia presentations, reels, sites, booklets, etc.; use of special computer programs, Internet both at the process of the task fulfillment, and in the presentation of the result of the quest and the exchange of views. The latter characterizes this technology as an information and communication one.

So, the educational quest is an integrated technology that combines the ideas of the design method, problem and game training, team interaction, combines purposeful search, auxiliary tasks with adventure and/or play on a certain plot.

The technological map of the educational quest includes the following elements,

structures and requirements for its development. The name should be short, attractive and original; the quest's direction should be indicated a subject or one of the priority areas of activity, a group of educational subjects and a complex of educational directions (interdisciplinary or integrated quest); objective and tasks – the first is of generalized character, diagnostic, while defining it and objectives the educational standards are guideline; duration – an educational quest can be developed for one lesson, a complex of classes, a week, a month or another time interval (short-term or long-term); age and target group – the account of age characteristics of senior school, youth, adult population) and their educational needs, including specifics of health; the main idea - the task should be of a problem nature, while developing the main task can take into account types of tasks, creative approach and inspiration. Along with the main task the additional tasks of different nature are worked out, it is desirable that among them the problematic ones predominated.

Various hints, labels, landmarks, which facilitate the organization of purposeful search, aimed at solving both the main and additional tasks are necessary. To complete quest various resources can be offered to students, e.g., a list of literature, including Internet sources, educational sites; multimedia presentations; clips, including social ones; electronic gadgets; devices and materials, etc. Criteria for evaluating students' activity are developed by the teacher, depending on the variety of the proposed tasks and the result. Quest result should correlate with the execution of the main task, for example: the problem is solved, the puzzle is solved, the discovery is made, etc. Educational result may be social video, booklet, research results, etc.

An important stage in quest's creation and requirements to it as an educational technology is the development of detailed criteria for evaluating both students' activities and their products. Quest is a complex task, so the evaluation of its implementation should be based on several criteria, oriented on the type of problem task and the form of presentation of the result.

Involving students in quests increases the motivation to study, because applying for really interesting problems for students, creating conditions for self-realization and self-affirmation in the environment close to them, correctly formulated topics and tasks of quests help to develop motivation to study.

Conclusions. Thus, quest-technology as any pedagogical technology has an invariant part, represented by the elements of its structure and the requirements for their content, defined in the technological map. Variance is realized in the work of the teacher, who will develop a legend, a plot, etc. taking into account pedagogical skills, the specifics of learning and the possibilities of an educational organization.

The main functions of quests in the educational process are general motivational, educational, and developmental.

In quest technology as a modern educational technology, all types of knowledge and their structural components must be taken into account, which will ensure the success of the implementation of educational standards and the achievement of the learning outcomes set forth therein. It is also worth noting that as a modern pedagogical

technology, quest solves several tasks.

1) Teaching – everyone is involved in an active cognitive process; individual and group activities of participants are organized; skills and abilities to work independently on the topic are revealed.

2) Developmental – development of interest in the subject of activity, creative abilities, imagination of the participants; formation of skills of research activity, abilities of independent work with information; extension of the horizons, erudition, motivation.

3) Educational – the education of personal responsibility for the task given.

This technology is enormously popular with modern students and is able not only to expand the horizons of learning, but also allows actively apply their knowledge and skills in practice, and cultivate a desire for learning in general. The essence of the quest, as a rule, is that there is some ultimate goal, and to reach it one can only if consistently unravel mysteries and solve the problems. Each riddle is the key to the next point and the next task. And the tasks can be very different: power, active, creative, intellectual. It is attractive for many people that quests can be conducted both in the audience and in the city, in the nature, that is, practically in any environment that solves the task of organizing both classroom and project work. Quest-technology has the structure of its own: goal-setting, planning, goal realization, analysis of results. It is possible to apply quest during all classes, and at its separate stages: at the motivation stage, the stage of actualization of knowledge, explanation of the new material, etc.

Thus, this technology becomes universal for the educational process, which facilitates the task of the teacher.

Considering the quest through the definition of game pedagogical technology, it can be argued that it has "clearly set up didactic task, game plan, leader, clear rules and is implemented to raise students' knowledge and skills" [3, 7, 9].

The prospect of further research we see in the study of other innovative forms of work in higher education institutions.

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