FORMATION OF ENTREPRENEURIAL COMPETENCE OF STUDENTS OF VOCATIONAL EDUCATIONAL INSTITUTIONS OF UKRAINE BY MEANS OF MODERN EDUCATIONAL TECHNOLOGIES

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Abstract. The article is devoted to the main directions of formation of entrepreneurial competence of students of professional educational institutions by means of educational technologies based on the activity basis. The content of the concept of "entrepreneurial competence" is substantiated and the ways of its formation with the help of web quest technology is considered.

Keywords: entrepreneurial competence, students of professional educational institutions, entrepreneurship, financial literacy, web quest technology, evaluation criteria.

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Introduction

Modern processes of reforming education at all levels and the integration intentions of our state for joining the European educational space reduce the problem of personality development in the rank of priority tasks. The current education system is trying to respond in a timely manner to changes in society and therefore the training of a modern student is reduced not only to the acquisition and assimilation of a system of knowledge but also to the ability of them as a competitive person to use the acquired knowledge for successful activity in any sphere of public life.

Application of web quest technology for the formation of entrepreneurial competence of students of vocational educational institutions

In the period of formation in Ukraine market relations the issues of youth economic preparedness for life and active professional activity in a society of competitive conditions are becoming more and more relevant. It is about the formation of entrepreneurial competence of students which in the future will increase their competitiveness in the labor market.

In this regard pedagogical science is in constant search of introduction of new most effective educational technologies the result of which should be the formation of an active creative person which is prepared for life and professional activity in a constantly changing environment. Vocational education as a basis for the social and economic development of the state perhaps the very first needs to change approaches at organizational and methodological levels.

The works of N. Bibik, L. Vashchenko, O. Lokshina, O. Pometun, O. Savchenko, A. Khutorsky and other scientists are devoted to the problem of competence approach in education.

Conceptual approaches to the formation of entrepreneurial competence are found in the works of M. Vachevsky, V. Dryzhak, V. Madzigon, S. Melnikova, O. Naboka, A. Nisimchuk, O. Padalka, N. Pasichnyk, I. Sasova, A. Shpak and others.

B. Bloom, T. Hilbert, S. Goncharenko, B. Dodge, V. Kilpatrick, O. Kobernik, O. Pekhota, O. Pometun, P. Podkasysty, Y. Polat, I. Robert, V. Sydorenko, S. Sysoeva, S. Smirnov and others made a significant contribution to the development of educational technologies on an activity basis. However, the main directions of formation of entrepreneurial competence of students of professional (vocational) educational institutions by means of activity educational technologies are not found enough investigated by this time.

The purpose of the article is to outline the main directions of formation entrepreneurial competence of students of vocational educational institutions by means of modern educational technologies based on the activity basis.

The transition of Ukrainian society to market relations requires radical changes in the labor and economic training of students. Such qualities of personality as autonomy, entrepreneurship and financial literacy are at the forefront and predetermine the ability to express their own thoughts, to think critically and systematically, to justify a position logically, to assess risks, to make decisions, to solve problems, to co-operate with other people (*The law of Ukraine, 2017*).

Entrepreneurship is a special innovative style of economic behavior based on the constant search for new opportunities for the development of the business. The components of entrepreneurship are a high professional level, a critical evaluation of their activities, optimism and independence in reasoning, ability to start and lead a business, to generate new ideas and implement them, readiness for innovation, risk aversion, ability to overcome obstacles, justification of the made decisions, maintaining good relations with the stuff and partners, loyalty to the given word and committed obligations (*Bashnyanyn, Iphtemchuk*, 2007).

However, the experience shows that the vast majority of students of vocational education institutions do not possess the basics of entrepreneurial activity, theoretical knowledge in economics, management, marketing, advertising, finance, banking, they are lost in the unpredictable market situation and cannot practically realize their abilities, knowledge and skills.

Therefore in the Law on Education of 2017 along with such key competencies as fluency in the state language, mathematical competence, competence in the field of natural sciences, technique and technologies, innovation, ecological competence, information and communication competence, civic and social competence, cultural competence it separately allocated entrepreneurship and financial literacy of personality as a basis for life and professional activity in a society of market relations (*The law of Ukraine, 2017*).

Analyzing the work of domestic and foreign scientists as for the formation of entrepreneurial competence O. Protsenko notes that this is a complex, contradictory, multilevel process that involves the mastery of entrepreneurial knowledge by the personality and the formation of entrepreneurial behavior on the condition of the corresponding formation of consciousness (*Protsenko*, 2013).

From the point of view of practical psychology entrepreneurial competence is personal quality, ability, model of behavior necessary for a successful business problem solving and achievement of high results in entrepreneurial activity (*Bilova*, 2013).

In the European reference system (Key Competences for Lifelong Learning. A European Reference Framework) entrepreneurial competence is interpreted as the ability of an

individual to embody ideas in the sphere of economic life as an integrated quality based on creativity, innovation, ability to risk as well as the ability to plan and organize entrepreneurial activity (*Rychen*, 2003).

In our opinion the most complete and well-founded definition of the concept of "entrepreneurial competence" is given by a domestic researcher V. Maikovska which characterizes entrepreneurial competence as the ability of a person to correlate his own economic interests with the available material, labor and natural resources and the interests of other people and society; be ready to act actively organizing own labor activity and work of the collective; to adapt timely to the new needs of the labor market assessing personal and professional capabilities and abilities; to make economically justified decisions and to draw up and implement plans of activity, to present information about its results. The scientist proved that entrepreneurial competence of future specialists is an integral part of professional competence and it ensures the direction of their activities to succeed in the future self-realization of professional activity in the sphere of business (*Maikovska, 2017*).

To our mind the practical implementation of the elements of entrepreneurial activity in the educational process of institutions of professional (vocational) education is of great importance. An approach that would provide an opportunity to identify students' inclinations to a specific activity and creating conditions for their development in appropriate abilities and have a practical orientation is important: opportunity to apply abilities and skills from related disciplines as well as use the final search product to build its own system of life and entrepreneurial competencies. One of the ways to achieve the goal is to introduce into the system of professional-theoretical and vocational-practical training of students modern educational technologies based on the activity basis namely project technology of teaching and web-quest as the kind of it.

During the project activity students study:

- cooperation;
- observation and selection of facts;
- awareness and problem statement;
- definition of study objectives;
- ability to work with information;
- use of acquired knowledge to achieve the goals;
- designing methods of activity;
- analysis of the obtained results;
- presentation of the results of work (Porokhnia, 2006).

The above-mentioned qualities and abilities realize entrepreneurial component of the project activity because they are called to teach students to find similarities and differences between production objects and phenomena, to teach them to analyze, predict and synthesize information, to urge to find several options for solving a particular production situation, to teach from new positions to consider well-known and to look for unknown ways to perform tasks that go beyond the standard thinking.

The essence of the project method is to stimulate students' interest in certain problems that presuppose possession of a certain amount of knowledge and through a project activity that helps to solve one or a number of problems to show the application of the acquired knowledge (*Kyian*, 2011).

Technologies of learning related to the use of Internet resources are becoming more widespread due to the massive informatization of the educational process. One of the kinds of

project-based online learning is web quest technology which has recently been actively introduced by teachers of vocational training.

Web quest is a well-known today learning technology created in 1995 in the United States by Bernie Dodge Professor of Educational Technologies at the University of San Diego. A well-known domestic researcher M. Kademiya gives the following definition to this concept: web-quest in pedagogy is a problem with elements of a role-playing game for which Internet information resources are used (*Kademiya, 2011*).

Web quests are essentially mini-projects based on finding information online. Through this constructive approach to learning students not only collect and organize information obtained from the Internet but also direct their activities to they face task associated with their future profession.

Web quest as a project method is focused on the student's independent activity: an individual, pair, group carried out after a certain period of time organically combined with cooperative learning. During its conducting students become participants in an exciting journey in the global network where for some time they independently search, analyze, formalize and provide information.

The role of the teacher in the organization of the web-quest is the creation of organizational and pedagogical conditions for the implementation of search activities, managing its parameters and setting time limits. The teacher does not assume the functions of a source of knowledge but only a tutor and students are not passive listeners but also independent active subjects of studying. At the same time, it is noted that the organization of web quest in the network requires a teacher of a high level of subject, methodological, information and communication competence (*Letsiuk*, 2014).

Web quest technology implements resource-based learning defined as a set of methods and learning tools aimed at a holistic approach to the organization of the educational process oriented not only to the assimilation of knowledge and acquiring skills but also on the training of the ability to independently and actively transform the information environment through the search and practical application of information resources (*Kononets, 2012*).

The classification of web quests is due to different kinds of tasks and has twelve types:

- Compilation tasks are the easiest web quest.

- Judgment tasks are tasks at their own discretion.
- Retelling tasks are searching for information for further transfer.

- Persuasion tasks are the tasks where students get an imaginary situation after studying which they must make a convincing story for their audience.

- Mystery tasks are the tasks where students are faced with a certain problem, mysterious story or riddle to be solved.

- Creative tasks are the creation of the final product of a certain format (composition, drawing, diagram, etc.).

- Journalistic tasks are the tasks where participants may feel like journalists.

- Design tasks are the creation of certain already approved product.

- Analytical tasks are the analysis of any phenomenon (may be real or imaginary, physical or abstract) in order to establish causal relationships.

- Self-knowledge tasks are the least popular kind of web-quest due to the fact that it is aimed at self-development through logic, guess and internal human resources.

- Consensus tasks are the consideration of controversial topics that are controversial in nature: euthanasia, legalization of light drugs, women's army, etc.

- Scientist tasks can be based on imaginary and real facts (Farreny, 2018).

Practice proves that the complex combination of different kinds of tasks is often the case making the web travel more diverse, unpredictable, interesting and their single application is rarely.

The approximate web quest structure:

1) introduction -a brief description of the topic;

2) task – the formulation of problem task and description of the form of presentation of the final result;

3) order of work and necessary resources – description of the sequence of actions, roles and resources necessary for the task, supporting materials;

4) an assessment - a description of the criteria and parameters for assessing the performance of the web-quest submitted as a rating form;

5) conclusion – a brief description of what students can learn;

6) used materials – links to the resources used to create a web-quest;

7) comments for the teacher – tutorials for teachers who use the web quest (*Romanov*, 2015).

As already noted web quest is a fairly new technology in the field of domestic educational space in general and in the system of vocational training of skilled workers in particular. However, teachers of vocational training are actively involved in its implementation in the process of professional-theoretical and vocational-practical training of students.

So recently a web quest on the topic "Modern Fair" was held in the Kirovograd Professional Lyceum in the sphere of services (*Blidar, 2017*). The teacher of the subjects of professional theoretical training by profession "Seller of food products and Controller-cashier" Hubry O.O. became the leader and developer of the event. The performers of the web-quest are students of the group DM-14 of KPLSS.

Introduction. The purpose of the web-quest on the topic "Modern Fair" was fastening knowledge of students in subject "Commodity studies of food products" and an attempt to teach them to work out new material using Internet resources, to find the necessary information, to analyze it and draw conclusions.

Task.

1) Share the teams (not less than five participants in each).

2) Choose the captain of the team.

3) The chosen captain at his own discretion gives each participant a role:

- a historian (studies the history of the emergence and development of a fair in Ukraine using Internet resources and gives the result to the captain);

- commodity specialist (describes the order of organization of the modern fair and gives the result to the captain);

- the marketer (creates a flyer-invitation to the fair and gives the result to the captain);

- the seller (informs the consumer with the product range and using photographs, pictures, information about consumer properties advertises the goods to the consumer (sellers choose the kind of product by way of a draw), gives the result to the captain).

4) Having received the role the students study the task setting before them and independently carry it out.

5) The results of performed tasks students execute in the form of one or two Power Point slides.

6) Having finished the completing of the task they give their results (slides) to the captain which composes them and generates a general response is a presentation to the quest.

7) The team which first presents a general presentation the contents of which will correspond to the tasks receives the victory.

Procedure of action. To fulfill the tasks of the web-quest students receive a list of necessary Internet resources for information search. Students uniting in groups carry out tasks consulting with a teacher in some cases. The winning team is the one, who will first present a general presentation that meets the necessary criteria for evaluation (developed by the teacher in advance) (see table 1).

Table 1

Nº b/o	Criteria for evaluating	The maximum number of points	Scored points
1	Content of work	5	
2	Literacy of registration	3	
3	Aesthetic design of work	2	
4	Work in group	2	
	Total points	12	
$(\mathbf{D}_{1}^{1}, 1_{2}, 2, 2, 1, 7)$			

Criteria for evaluating responses and presentations

(Blidar, 2017)

Conclusion. Historians presented information about the emergence and development of a fair in Ukraine. Commodity researchers described the organization of the fair in our time. Marketers developed a design of flyer-invitation to the fair. The sellers presented the range of the product and information about its consumer properties for the purpose of advertising.

General conclusion. During the web-quest on the theme "Modern Fair" students consolidated their knowledge in subject "Commodity studies of food products", learned to work out independently new material using Internet resources, to find the right information, to analyze and draw conclusions and to work in a team.

Used Resources.

- http://yarmarok.in.ua
- http://wiki.ciit.zp.ua
- http://studopedia.org/9-26541.html
- http://pidruchniki.com

Conclusions and suggestions

So as we can see using modern educational technologies based on the activity basis (in particular web quest) promotes the development of key abilities and personality qualities which are necessary for forming the entrepreneurial competence of a future specialist: use of information technologies for the solution of professional tasks, self-learning and self-organization, team-oriented problem solving skills, the ability to find several ways to solve a problem situation, skills of public speaking, aspiration for professional self-improvement.

Thus students are interested in learning process, the actual outlook of production problems and the ways of their solution are formed, they approximately determine the life position and their own place in the modern world due to the novelty and originality of the forming of entrepreneurial competence through project technologies and provided they are properly organized.

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