

ANALYSIS OF THE POSSIBILITIES OF APPLICATION OF QUEST TECHNOLOGIES IN PROFESSIONAL ORIENTATION WORK

Rybalchenko Svitlana

*Candidate of Sciences in Economics (Ph.D.),
Oleg Balatskyi Department of Management,
Sumy State University, Ukraine
s.rybalchenko@management.sumdu.edu.ua*

Inna Balahurovska,

*PhD student, Oleg Balatskyi Department of Management, BiEM,
Sumy State University, Ukraine
i.balahurovska@biem.sumdu.edu.ua*

Kateryna Zahoruiko,

*student, Oleg Balatskyi Department of Management, BiEM,
Sumy State University, Ukraine
M-82 group*

Alisa Balahurovska

*student of Sumy Construction College, Ukraine
AP-24 group*

The development of modern Ukrainian education requires the use of fundamentally new tools of activity in the educational process. Focusing on the formation of a personality capable of independently solving situational tasks and making the most effective decisions is the task of a modern, competent teacher. A correctly chosen profession and the development of the necessary competencies and practical skills in the selected activity of each person form a developed and educated society. Such a society strives for growth in all social processes of the country, which in modern conditions needs highly qualified and modern specialists. Quest (web-quest) technology is one of the effective tools for the comprehensive development of students.

The paper describes the approaches of scientists to defining the essence and features of the quest (web-quest) technology. The forms of quests that solve various tasks with the help of the Internet, help students' personality development and help in career guidance activities are considered. Ways of implementing this tool in educational activities, which are aimed at creating conditions for high-quality training and career guidance activities that contribute to the correct choice of the future specialty of each member of society, are analyzed. The importance of using communication technologies when using the described technology is emphasized.

The article discusses the main tasks of the technology quest, the implementation of which ensures the development of the student's intellectual abilities and forms the necessary professional competencies for a particular activity. The role of the quest in the career guidance activities of education representatives is also considered.

The main competencies that develop during the use and implementation of quest technology in students and students have been studied. It was also analyzed how the combination of play and learning contributes to the effective interaction of the student with all elements of the educational process and the achievement of high results in education.

The pedagogical goals of implementing educational quests are described, contributing to the correct choice of a person's future specialty and practical training in the chosen activity.

Keywords: *technology quest, web quest, competencies, professional activities, abilities and skills.*

DOI: 10.21272/1817-9215.2022.3-14

PROBLEM STATEMENT

Today we understand: to be an excellent professional means to be in constant search, growth, and development. The teacher's work is characterized by high mobility and extreme complexity. It requires deep and versatile scientific and professional knowledge, abilities, and skills that form the basis of his professional competence. The comprehensive and effective implementation of innovative methods in the educational process contributes to improving its quality and the interest of students, students, and teachers, which is an important stage of reforming the traditional education system in the context of globalization. One technique that teaches how to find the necessary information, analyze it, systematize and solve the tasks is the quest (web-quest) technology.

ANALYSIS OF THE RECENT RESEARCH AND PUBLICATIONS

The use of quests is analyzed in foreign studies, particularly in the works of B. Dodge, J. Taina, T. Kailova, T. Salomaki. A. Baranov, and Ya. Tarakanov believes that quests develop leadership qualities. The results of G. Gadamer and J. Huizing allow us to consider the potential of quests and the possibilities of their application to identify the abilities and skills of students. T. March emphasizes that any web quest should not be isolated from the educational process as a whole; it needs a direct connection with students' previous and subsequent cognitive activities.

OBJECTIVE STATEMENT

In the modernization of the modern Ukrainian education system, knowledge, skills, and abilities are increasingly considered not as the primary goal of education but as an instrumental basis for the formation of student competencies. Within the new educational paradigm of system-activity learning, the priority is the integral development of the student's personality, ability to reflect, and independence in decision-making. In these conditions, cognitive interest becomes a powerful means of activating competencies and potential, and using new innovative educational technologies becomes the most important tool. Among the innovations in the organization of the career guidance process today, we can safely include quest technology, which in the conditions of the spread of the Internet and the wide use of various communication technologies, can find a worthy place because it is necessary to use the features of quest technologies as an effective tool to reveal their potential and abilities, to make them aware of their advantages and opportunities in the process of choosing a specialty in the future.

RESEARCH METHODS

In work, in the process of research and processing of materials, methods of comparison and systematization were used - in the analysis of scientific research in the direction of the development of quest technologies, structural analysis and synthesis - an analysis of the main competencies that allow the use of quest technologies, the method of logical generalization - in the analysis was carried out possibilities of using existing scientific and methodological approaches to the use of quests in educational activities.

RESEARCH RESULTS

For the first time, the web quest was introduced into educational practice thanks to Bernie Dodge, a professor of educational technologies at the University of San Diego (USA), in 1995: the scientist was looking for various ways to use the Internet for educational purposes. He defined the following types of tasks for web quests, which later formed the basis of their traditional classification (table 1). Scientists developed innovative applications for the Internet for integration into the educational process when teaching various academic subjects at different levels of education. He called the site, which contains a problematic task and involves an independent search for information on the Internet, a quest.

These tasks show how science actually "works"; the student can see scientific studies' structure, put forward a hypothesis, and check and compare the final result according to the declared results. Practice proves that most often, there is a complex combination of various types of tasks, which makes the web journey more diverse, unpredictable, exciting, and effective for revealing one's abilities.

Attempts to expand and supplement Bernie Dodge's definition were made by Thomas

March. He significantly detailed the concept and presented some theoretical formulations that helped to penetrate deeper into the essence of the quest technology.

Table 1 – The main tasks of the quest according to B. Doja [4, 5]

Category	Meaning
1) Compilation tasks (data collection task)	The most superficial web quest, since the goal of the student's activity, is to look through specific resources on the Internet and select the necessary information for any compilation (cookbook, dictionary, essay, etc.).
2) Judgment tasks - task at your own discretion (opinion)	The purpose of a webquest is to collect data about specific events to present an opinion about them further.
3) Retelling tasks (transfer task)	The process of finding information for its further transfer.
4) Persuasion tasks (persuasive task)	Students receive an imaginary situation; after studying it, they have to compose a convincing story for their audience.
5) Mystery tasks (detective task)	Students are faced with a specific problem, a mysterious story, or a riddle to solve. To find the solution, students have to participate in the investigation, playing different roles and learning to analyze information from other points of view. Based on the results of such work, a convincing speech is written to defend one's point of view.
6) Creative tasks	Creating a final product of a particular format (an essay, a drawing, a diagram, etc.).
7) Journalistic tasks (journalistic investigation)	Participants can feel like journalists, collecting information about the research object, summarizing it, and presenting it as a slide show, article, or report.
8) Design tasks	Creation of a specific, already approved product. An example of a design task can be creating various types of brochures, layouts, etc.
9) Analytical tasks	The analysis of any phenomenon (real or imaginary, physical or abstract) establishes cause-and-effect relationships.
10) Self-knowledge tasks	The least popular type of web quest is aimed at self-development through logic, guesswork, and internal human resources.
11) Consensus tasks (seeking consent)	Consideration of controversial topics that are controversial by their nature: euthanasia, legalization of soft drugs, women's army, etc. Discussion of such issues contributes to the coverage of all points of view, "for" and "against." A consensus can be reached on the issue under consideration only after a thorough discussion.
12) Scientist tasks	It can be based on imaginary and real facts.

A quest (or a web quest), according to T. March [6, 7], is an educational structure built according to the type of pillars, which uses links to significantly important resources on the Internet and authentic tasks to motivate students to research and -what kind of problem with an ambiguous solution, thereby developing their ability to work both individually and in a group (at the final stage) in searching for information and transforming it into more complex knowledge (understanding). The best quests achieve this in such a way that students begin to understand the richness of thematic connections, are more easily included in the learning process, and learn to reflect on their cognitive function [1, 2]. The model was popular in Brazil, Spain, China, Australia, Holland, and America. On the territory of the domestic educational space of the quest (web-quest), the technology is at the stage of its formation and theoretical justification.

As noted by V.V. Schmidt, quests are mini-projects based on searching for information on the Internet. Thanks to such a constructive approach, students not only select and organize information from the Internet but also direct their activities to the task set before them, related to their future profession. THEN. Kuznetsova considers the quest as an example of organizing an interactive educational environment. A.V. Yakovenko, in his article "The use of web quest technology in language education," reveals the concept of a quest as a problematic task with elements of a role-playing game for the implementation of information resources on the Internet are used. According to O.G. Shevtsova, a quest is a problem-solving activity. If you highlight the keywords of the definitions, you can see that the quests are: sites, activities, projects, problematic tasks, method, technology, etc.

That is, there is no single interpretation of the concept of "quest"; therefore, many theoretical and empirical studies are devoted to the issue of using quest technology.

Thus, it can be noted that the educational quest, as an interactive form of scholarly activity, allows you to solve specific tasks (table 2).

Table 2 – The main tasks of the educational quest

Tasks	Meaning
1. Educational	Involvement of each student in an active cognitive process (organization of individual and group activities, identification of skills and abilities to work independently on any topic).
2. Developmental	Development of interest in the process (profession), creative abilities, the imagination of students, formation of research skills, ability to work independently with information, broadening of horizons, erudition, and motivation.
3. Educational	Education of personal responsibility for the completed task, respect for work and the chosen profession, discipline, conscientiousness, initiative, respect for cultural traditions, history, local lore, and the ability to work in a team.

Thus, a quest can be defined as an intellectual game consisting of solving specially prepared tasks. Many kinds of quests take place in open spaces and city streets. Sometimes quests are organized in a museum, in a historic manor house. Common quests are introductions to the educational institution, which take place in all internal and external spaces - classrooms, recreation areas, library halls, museums, laboratories, etc.

As a particular form of intellectual activity, the quest involves searching for information (finding various clues) and solving the tasks set before the players. Information search precedes decisions, but still, the main goal is the ability to use information as a key to solving tasks and achieving the game goal [3]. The study conditions are a simulation of a game situation that is unexpected for the players, so the quest involves the ability to adapt to new requirements and make independent decisions in a limited time. In this way, quests contribute to the development of analytical and creative thinking of students and contribute to the formation of problem-solving skills and the ability to work in a team.

Thus, the quest is a game and learning at the same time. This is an exciting and promising type of activity and role-playing game. Performing different roles, students consider any problem from different angles. Students work in such a variant of project activity as a quest diversifies the educational process. It will make it lively and exciting, and the experience gained will bear fruit in the future because some competencies are developed when working on this project (table 3).

Table 3 – Core competencies developed by quest technologies

Competence	Meaning
1. Use of IT technologies	It is used to search for the necessary information and design work results in the form of computer presentations, websites; – self-learning, and self-organization;
2. Work in a team	Planning, distribution of functions, mutual assistance, mutual control.
3. Analytical work	The ability to find several solutions to a problem, determine the most rational option, and justify one's choice is developed.
4. Communication activity	The skill of public speaking, preparation, and systematization of communication channels.

The following pedagogical goals of using new information technologies, in particular quest technologies, should be highlighted: - development of students' individuality and personality; - aesthetic education; - development of thinking (visual-active, visual-figurative, intuitive, creative); - development of communication skills; - formation of the ability to make quick decisions or offer solutions in a difficult situation; - formation of information culture.

CONCLUSIONS

Because a quest is a specific form of game activity that requires participants to find a solution to the tasks, and in current conditions, the quest becomes a new practice of social communication, a new type of active recreation for educated youth. Quest-project activity within the framework of an educational institution has a special educational value: it educates personal responsibility, respect for cultural traditions, history, and local lore; forms a culture of interpersonal relations and tolerance; strives for self-realization and self-improvement.

Thus, the educational quest, as an interactive form of educational activity, allows you to solve the following tasks: educational - involvement of each student in an active cognitive process (organization of individual and group activities of students, identification of skills and abilities to work independently on any topic); developing - development of interest in the profession, creative abilities, imagination of students, formation of research skills, ability to work independently with information, broadening of horizons, erudition, motivation; educational - education of personal responsibility for the completed task, respect for work and the chosen profession, discipline, conscientiousness, initiative, respect for cultural traditions, history, local lore, the ability to work in a team. That will ensure they make the right choice for their future and maximize their potential.

АНОТАЦІЯ

Розвиток сучасної української освіти потребує використання принципово нових інструментів діяльності в навчальному процесі. Орієнтація на формування особистості, яка здатна самостійно вирішувати ситуативні завдання та приймати максимально ефективні рішення є завданням сучасного компетентного педагога. Правильно обрана професія та розвиток необхідних компетентностей і практичних навичок в обраному виді діяльності кожної людини формує розвинуте та освічене суспільство. Таке суспільство прагне до розвитку в усіх суспільних процесах країни, яка в сучасних умовах потребує висококваліфікованих та сучасних спеціалістів. Одним з дієвих інструментів для всебічного розвитку учнів є квест (веб-квест) технологія.

В роботі описані підходи науковців до визначення сутності та особливості квест (веб-квест) технології. Розглянуто форми квестів, які за допомогою Інтернету вирішують різні завдання, сприяють розвитку особистості учнів та допомагають в профорієнтаційній діяльності. Проаналізовані шляхи реалізації цього інструменту в освітній діяльності, яка націлена на створення умов для якісного навчання та профорієнтаційній діяльності, яка сприяє правильному вибору майбутньої спеціальності кожного члена суспільства. Наголошено на важливості використання комунікаційних технологій при використанні описаної технології.

В статті розглянуто основні завдання квест технології, виконання яких забезпечує розвиток інтелектуальних здібностей учня та формує у нього необхідні професійні для певної діяльності компетентності. Також розглянуто роль квесту в профорієнтаційній діяльності представників освіти.

Досліджено основні компетентності, які розвиваються під час використання і реалізації квест технології в учнів та здобувачів. Також проаналізовано, яким чином поєднання гри і навчання сприяє ефективній взаємодії учня з усіма елементами навчального процесу та досягненню високих результатів в навчанні.

Описано педагогічні цілі реалізації освітніх квестів, які сприяють правильному вибору майбутньої спеціальності людини та ефективного навчання в обраному виді діяльності.

Ключові слова: квест-технології, веб-квест, компетентності, професійна діяльність, здібності та навички.

REFERENCES

1. Ilchenko, O. (2012) Vykorystannia web-kvestiv u navchalno-vykhovnomu protsesi [The use of web-quests in the educational process]. URL: https://urok.osvita.ua/materials/edu_technology/30113/
2. Dychkivska, I. (2004). Innovatsiini pedahohichni tekhnolohii [Innovative pedagogical technologies]. Kyiv : Akademvydav [in Ukrainian]
3. Sokol, I. (2014) Klasyfikatsiia kvestiv [Classification of quests]. *Pedahohika formuvannia tvorchoi osobystosti u vyshchii i zahalnoosvitnii shkolakh*, 36 (89), 369 – 375.
4. Dodge, B. (1997) Some Thoughts About WebQuests. URL: http://webquest.sdsu.edu/about_webquests.
5. Dodge B. Rethinking the WebQuest Taskonomy: A New Taxonomy of Authentic Constructivist Tasks. URL: <http://questgarden.com>
6. March T. Criteria for Assessing Best WebQuests. URL: <http://www.bestwebquests.com/bwq/matrix.asp>
7. March, T. (1998). Why Web Quests? An introduction. URL: www.ozline.com/webquests/intro.html