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e-mail: osaka@sci-conf.com.ua
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WEB-QUEST AS AN INNOVATIVE TECHNOLOGY OF PREPARING FUTURE TEACHERS

Kyselyova Olesya Borysivna,
PhD in pedagogical sciences,
Associate Professor of Informatics
Municipal establishment "Kharkiv humanitarian-pedagogical academy" of Kharkiv regional council
Kharkiv, Ukraine

Abstract. The article discusses the benefits of using a web quest as an innovative technology for educating future educators. Its main structural components are given. The most appropriate Internet services for use in the process of designing a web-based quest in each of its organizational stage are reviewed.
Key words: web-quest, web-services, preparation of future teachers.

Present education requires urgent changes at all levels to reformat educational paradigm-centered approach based on the development of the internal potential of the individual, his independence, intelligence, critical thinking, creativity and more. Immediate solution of the set tasks is actualized by testing innovative methods and teaching aids, creating new and improving traditional learning technologies, which would form the ability of self-development students, the ability to plan their own activities, perform tasks in finding and processing information, the ability to develop and implement projects. It is the integration of the project method and ICT that makes it possible to single out such innovative learning technology as the web-quest.

Nowadays research of such scientists as V. Bykov, Y. Bulakhova, O. Bondarenko, V. Zabolotny, G. Kozlakova, O. Mishchenko, O. Pinchuk, O. Shestopal and others is devoted to the topic of introduction of the latest information and communication technologies in Ukraine. The use of Internet-based services that allow educators to

solve a variety of educational tasks has become widespread, as well as an important tool for optimizing the educational process (N. Balyk, N. Dimentievskaya, N. Khmil, O. Kyselova, N. Morse, E. Patarakin, M. Zolochevska and others).

As evidenced by the analysis of scientific and pedagogical literature, the development and use of web-quests in the educational process were investigated by M. Andreeva, Y. Bykhovsky, O. Gapeyeva, B. Dodge, M. Kademiya, N. Kononets, T. March, S. Meshkova, N. Nikolaev, E. Polat, Y. Sikora, V. Silantiev, G. Shamatonov, M. Shapovalov and others. However, despite the considerable attention of researchers to this problem, the process of organizing a web-quest as an innovative technology of preparing future teachers remain insufficiently covered, which is the purpose of our work.

"Quest" in English is a long, focused search that can be related to adventure or game [1]; is a site on the Internet that students work with while performing a particular educational task [2]. Thomas March attempted to expand and supplement the definition of a web quest by substantially detailing the concept, and introduced a number of theoretical considerations that help to delve deeper into the essence of the web quest. He notes that this is a supportive educational structure that uses links to essential Internet resources and authentic tasks to motivate students to pursue a research problem with an ambiguous solution, developing in them the ability to work both individually and in a group (at the final stage) in the process of finding information and transforming it into a more complex task [3]. Web quests bring about the fact that students begin to understand the diversity of thematic connections, become more involved in the process, and learn to analyze their own cognitive process.

Let us take a closer look at the structural components of a web quest. First, an introduction with a clear description of the lead roles of the participants or a scenario of the quest, a preliminary work plan, is required. Then a central task is given, which clearly defines the result of the independent work. It is desirable to provide a list of required information resources. The following components of the quest – a description of the algorithm of work that must be performed for each participant of

the quest in the case of independent performance of tasks; criteria for evaluating the outcome of a web quest. An indispensable element is a summary of the experience gained by the participants while working on a web quest [4].

The work on projects goes through several stages: proposal of the project theme; planning; choice of methods and resources for work on the project, forms of presentation of its results; work on the project; defense preparation and project presentation. Consider the appropriate steps for working on the web-quest "Travelling the Country of Informatics" for the students (https://bitly.su/oEInMlB). At the initial stage, students register, get acquainted with the basic concepts of the chosen topic, materials, distribute roles within a team where all participants have to work together. At the role stage, individual teamwork is aimed at the overall result. The first step is travel to the Virtual Museum of Informatics "History of Information Technology Development in Ukraine". Next, students complete the tasks: the journey "History of Computer Science" and "To the origins of the Internet", explore the relevance of the topic of computer science through the eyes of students. The team collectively summarizes after each task, participants exchange materials to achieve a common goal. At the final stage, teams reflect and defend projects. According to the results of the study, conclusions and suggestions are formulated. Criteria for evaluating results can be understand the task, the reliability of the information used, critical analysis, logic, structured information, clarity and conciseness in solving the problem, individuality, professionalism of presentation [5].

Consider a tentative list of online services for organizing a web quest for students. So, in order to choose the topic of the project, you can conduct a brainstorming session with the creation of a mental map (Bubbl.us, MindMeister), organize a discussion on a forum or blog, conduct surveys using the Google form. At the planning stage, where students formulate tasks, allocate roles in the team, identify sources of information, use Google-documents, mind maps, Google-organizer and more. It is important for the teacher to familiarize the students with the methods of completing the quest tasks (studying literature, searching information on the Internet, using various Internet services for visualization and collaboration, etc.).

Working on web assignments is main stage, as the main time students are engaged in the selection of material, the development of experimentation techniques, video recording, sociological surveys, etc. Virtual interactive whiteboards (WikiWall, Padlet, Twiddla) will be useful for organizing collaboration. It is also very important to structure the substantive part of the project with staging results. The teacher can carry out the intermediate control through Google forms or Google documents.

In preparation for the protection of the project, it is advisable to use the services of creating infographics. For example, mind maps (Bubbl.us, FreeMind), timeline (www.dipity.com), keyword cloud (Wordle, www.tagxedo.com/), charts and graphs (OmniGraffle), interactive maps (Api.yandex.ru/maps/tools/constructor, mapsengine.google.com/map), 3D-infographics (CromeExperiments, WebGL) and more. At this stage, it is possible to arrange a portfolio (SlideShare, Calaméo, Prezi). In addition, wiki technology is a powerful tool for quickly posting material, discussing significant issues, and sharing thoughts. It is also handy for creating a web portfolio to which a user can add links, images, polls, videos, audios, knowledge maps, files and more to the wiki page. Presentation and defense of the project can be organized on-line using a Skype conference, webinar, a collective evaluation of the results obtained, using a Google document, a Google-form, etc.

Summarizing the concept of the Web quest, we can say that this technology combines the ideas of project method and game technology through the Internet. Working with Web Quests can also be helpful for students who are seeking to deepen their knowledge of a particular discipline and enhance their academic background. This technology is appropriate for preparing students for Olympiads, conferences, scientific activity and more. Therefore, the web-quest is an interesting innovative learning technology that provides motivation to learn certain material and maximize student activity in the learning process. Diversification of the learning process gives an opportunity to interest and encourage the student to study the educational material, which is the main goal of the teacher. In addition, in the process of its passage, students develop skills of operational and strategic goal setting, choice of priorities, self-organization.

REFERENCES

1. Encyclopedia of Education. Acad. ped. of Sciences of Ukraine: [Goal. ed. V.G. Kremen']. Kyiv: Yurincom Inter, 2008. 1040 p.

2. Kademiya M.Yu., Shestopalyuk O.V. Web quest in training future teachers : navch.-metod. posib., Vinny`cya : TOV Firma «Planer», 2013. 155 p.

3. Andreeva M. V. Technologies Web-quest in the formation of communicative and sociocultural competence. *Informacionno-kommunikacionnye tekhnologii v obuchenii inostrannym yazykam*. Tezisy dokladov I Mezhdunar. nauch.-prakt. konf. Moskva, 2004. P. 17-19.

4. Gurevy`ch R.S., Kademiya M.Yu., Shevchenko L.S. Interactive learning technologies at a higher education institution: navch. posib.; za red. Gurevy`cha R.S., Vinny`cya : TOV firma «Planer», 2013. 309 p.

5. Kyselova O.B., Ivanova M.V. Use of Internet services in the organization process web-quest for college students. *Elektronni informacijni resursy`: stvorennya, vy`kory`stannya, dostup*: Vseukr. naukovo-prakt. Internet-konf. (Vinny`cya, 8-9 ly`stopada 2019 roku), Vinny`cya. 2019. P.98-103.