THE IMPORTANCE OF THE VIRTUAL MUSEUMS IN THE EDUCATIONAL PROCESS

Rasuljon Kadirjonovich Atamuratov
Senior teacher at Alisher Navai Tashkent state Uzbek language and literature university, UZBEKISTAN

ABSTRACT

The article discusses the place of the virtual museums in the educational process, the ideas about museum pedagogy, the advantages of the virtual museums and the results of the explorations on using them in the teaching process.

Keywords: Museum pedagogy, virtual museum, virtual museum, virtual travel, multimedia museum, 3D museum.

INTRODUCTION

International organizations and developed countries around the world adopted a pack which says that by 2023: The new concept of education “should assist strengthening the education system, spreading knowledge, operating various sources of information, and using new information and communication technologies to create quality and effective education”[1].

Vast development of computer and information technology, globalization and informatization processes in all sectors, including education, illustrate their influence each sphere of modern life. Identification of new possibilities for the use of computers in the learning process and their implementation in practice is one of the most important factors of effective organization of the educational. Formation of skills of students in the learning process to understand the reality on the basis of virtual reality technologies is being considered and classified as urgent in all areas of human activity.

A bright example for this can be virtual museums that serve as a grandiose tool for not only preserving the cultural heritage, but also providing a variety of ways of installing the heritage displays into the internet with the help of information and communication technologies.

What are virtual museums and why do we need ones? There are some vivid examples that throughout human history museums played a role of an invaluable assistant in the process of bringing up the young generation, installing in them humanitarian values and sense of self-worth; they motivate students to value lives of others as high as their own, they teach to differentiate right from wrong, and good from vice.

The museum is place that tells about ancient and recent history, at the same time it can be perceived as an education and training center due to its live, natural and visual materials, which in their turn operate as illustrative for grounding a proper character in the future.

Using museums for educational purposes started at the beginning of the XX centuries in Germany. A. A Lichtwark, Reychwen and R. Freudental pioneered the concept of museum pedagogy. This concept includes the synergy among educational process, pedagogy, museum art and psychology.
According to J.K. Frisen, museum pedagogy is a tradition of artistic education integrated with museum tools, which relies on educational work and museum didactics.

R. Freudental was the first to develop a methodology for conducting school classes system in museums. He organized museum based classes for students with experts called museum teachers as well.

The museum teacher is pedagogical skilled person with deep knowledge of culture and creativity psychology, who also knows a wide variety of facts on various fields and ability to work in the classroom and museum environment[2].

In 1991, web sites of museums have been developed. Traditional museums are considered to be a basis for the latter. Private virtual museums have also been created due to the rapid exchange of information across the Internet. A bright example for this can be an online virtual museum of Louvre created in 1994.

Virtual museums are well known for their communicative, educational, aesthetic and motivational characteristics.

A virtual museum can be exploited in order to have a virtual tour, competitions and events.

A virtual museum is a type of a web-site, where art objects, historical displays, collections and exhibits can be observed and it gives the chance of organization of the educational process in a specially designed platform. A museum based on Web technologies outweigh the traditional museums in the higher levels of security, maintenance and other problem-solving procedures.

According to A.Budko one of the most important steps in the broadening and developing the idea of museums creation of new projects, modernization of museums and their international collaboration. Modernizations of museums is a conceptual system of structural and technological changes the museums provide as a part of vital and current future[3].

According to D.Filonov should create the media content basing of the conceptual story of their own and work out new projects that will provide both visitors and museum staff with wide opportunities[4].

The following tasks should be addressed in the creation of virtual museums:
- Selection of necessary information (museum exhibits and materials);
- Formation of the principle of funding the displays;
- Creation of managerial structure;
- Creation of system for searching and sorting out of information;
- Filling in the information database;
- Creating the project of storage and display of materials;
- Creation of the unique network, which will allow stable and continuous operation of information systems;
In order for the virtual educational museums’ stable operation:
- Stable functioning of all system links;
- Avoiding of the system bugs affecting the work of independent links;
- “Location transparency” of information is a must-have for the system. Users do not need to know the location of the source of the information required[5].
Currently, there is an internet system, which allows us the creation of such a network. This is the most effective way to access various types of information online. In addition, it allows monitoring information on variety platforms.

Another advantage of virtual museums is the fact that all the exhibits are displayed in virtual panorama mode. At the same time, it is possible to see exhibits at 360 angle. This panorama mode is also called circular panorama. The objects can interact in this kind of panorama. Once the mode of “active source” is chosen, the users can observe and interact with the following objects, zooming them in and out or obtaining extra information about them.

The next way of obtaining the information in virtual museums is a virtual travel. Virtual travel consists of animated objects, multimedia displays and audible information.

All of this creates a real opportunities to interact with the collections of the exhibits which can be accessed in a virtual museum. All things and objects will be constructed in their 3D models. One can stay as long as they need in front of a special exhibit or the room and have unlimited amount of time to carefully study and examine the exhibits.

According to E.V. Alexandrova, virtual travel is a type of a motivational education, which provides the learner with an extra stimulation and curiosity for the subject through visual materials (photographs, audio recordings, video)[6].

G. N. Akvileva virtual defines virtual travels as a creative and organizational form of learning, which provides the learner with the opportunity to select and operate the material and the direction they want to change in accordance with the objectives and content enables virtual demonstrations knowledge[7].

Learning through virtual museums gives children, who cannot visit traditional museums for a variety of reasons (physical disabilities, pupils from regional and rural schools), a second chance for obtaining aesthetic education and access to world’s historical and cultural heritage.

**RESULTS**

It becomes obvious that virtual museums are not places for keeping heritage of humanity but a functional communicational center. That is, it gives anyone a chance to gain new knowledge and skills. As part of our investigation a survey was conducted among the students of Uzbek philology faculty of Alisher Navai Tashkent state university of the Uzbek language and literature. In the survey, the students were asked to respond about the advantages of creation of the virtual museums and their educational benefits (the student were supposed to use virtual museums installed on the computers during their independent studying hours without the participation of teacher). More than 100 freshmen students participated in the survey. Students showed the benefits of virtual museum in their answers to the questions of the survey.
Table of provided answers

<table>
<thead>
<tr>
<th>No.</th>
<th>Survey questions</th>
<th>Answers</th>
<th>In per cents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Is it possible to gain more information through virtual educational museums in the educational process?</td>
<td>No</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>70</td>
</tr>
<tr>
<td>2.</td>
<td>Is it more advantageous to get information from virtual educational museums or textbook during independent studying hours?</td>
<td>using a textbook</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td></td>
<td>virtual educational museums</td>
<td>72</td>
</tr>
<tr>
<td></td>
<td></td>
<td>It doesn't matter</td>
<td>-</td>
</tr>
<tr>
<td>3.</td>
<td>Do you feel tired studying on virtual educational museum training?</td>
<td>No</td>
<td>74</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>26</td>
</tr>
<tr>
<td>4.</td>
<td>What are the influences of virtual educational museum lessons on you?</td>
<td>Positive</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Satisfactory</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bad</td>
<td>-</td>
</tr>
<tr>
<td>5.</td>
<td>Was the organizational process of laboratory works based on virtual educational museum system clear for you?</td>
<td>Yes</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>15</td>
</tr>
<tr>
<td>6.</td>
<td>Do you enjoy working on the virtual educational museum system?</td>
<td>Yes</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>20</td>
</tr>
<tr>
<td>7.</td>
<td>What was the level of the acquisition impact for lectures, practical and laboratory training lessons on the basis of the new information through virtual educational museum. Give in percentages.</td>
<td>lecture</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td></td>
<td>practical</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td></td>
<td>laboratory</td>
<td>75</td>
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The answers to the questionnaires show that the majority of students said that the organization of the educational process using virtual-educational museums provides a great opportunity for them to acquire their knowledge independently.

CONCLUSIONS

Thus, it can be concluded that virtual educational museum systems will assist in bringing up the youth of Uzbekistan in the spirit of patriotism, independent thinking, alertness, and developing their sense of protecting and keeping the material spiritual heritage. This in its turn show the true potential of virtual educational museum and their potential in creation of more lively and interesting lessons in the education and training.

REFERENCES