Teoretičeskaâ i prikladnaâ nauka

Theoretical & Applied Science

Contents

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THE EFFECTIVENESS OF TIMELINE INTERACTIVE WEB SERVICE IN DELIVERING LESSONS ON "HISTORY OF PERSONAL COMPUTERS"

Abstract: The article provides information on the role of timeline interactive web service in the educational process, the advantages of visualization of computer science topics using timeline and their application in the educational process.
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Introduction

World experience in the educational process, the introduction of network resources, modern programs and technologies, the creation of modern methods of acquiring new knowledge, reforming the educational process and the development of new organizational forms and methods of quality education, its implementation is becoming a demand day by day.

At the same time, the current state of the national education system requires the modernization of it on the basis of modern requirements, the implementation of consistent measures to educate young people as highly educated, the formation of modern knowledge and skills. To implementing these requirements, education needs modern information and communication technologies to improve the learning process.

Indeed, the modern trends of society, the development of computer technology, globalization and the process of informatization have affected all areas, including education. Identifying new opportunities for the use of computers in the educational process and their implementation is one of the important factors in the effective organization of the educational process [1].

In our country, a number of scientific studies have been conducted to improve the education system, the use of modern methods that increase the interactivity of the educational process in the organization of teaching. In particular, the scientific and methodological problems of teaching computer science, the introduction of information and communication technologies in the educational process, the essence of the organization of the educational process on the basis of Web technologies, the development of e-learning resources studied by A.Abdukadirov, M.Aripov, U.Begimkulov, I.Boynazarov, F.Zakirova, N.Taylakov, M.Fayziyeva, N.Khaytullayeva and many other scientists on the problems of creation and application and developed scientific and methodological bases.

Today, the rapid development of Internet technology is promising in the field of education. New methods of web-based learning, such as software, information resources, and technology, allow for person-centered learning at any time.

The technology of visualization of educational materials resonates with the pedagogical concept of visual literacy, which emerged in the late 60s of the twentieth century. This concept is based on the need for man to understand and know the world, the leading role of the image in the process of perception and understanding, the need to prepare the human mind for increasingly "visualized" world activities and gradually increase the information load. Modern educational trends require special preparation of

teaching materials in a visible form, enriching them with basic or necessary information before presenting them to students.

Therefore, the technique of visualization has a strong place in the educational process. Examples include Mind map, Timeline, Infographics, and Scribing.

Not all Internet services are universal. They have a specific topic and the teacher must choose an Internet service that allows them to cover the topic in full.

Like many other disciplines, Computer Science provides information on historical dates, events and chronology.

With the help of such information, it is important to develop students' ability to understand and visualize the interrelationships and interactions of historical events. The TIMELINE interactive internet service can help us to effectively develop these competencies and teach students to work actively and interactively.

Maria Montessori, an Italian educator, was one of the first to introduce the use of time lines in education.

Timeline (English word "time line") is a Web 2.0 service that allows users to view, create, compare, and share interactive spreadsheets.

The interactive Internet service Timeline has its own scale, line, scale and arrows, which are used to create chronological and periodic lines [3].

Timeline is used in pedagogy as a graphic model. Serves to represent large amounts of chronological and chronological information in a graphical form. Such timelines can also include text information, photos, videos, and links to Internet resources.

According to Y.Eelmaa, timeline interactive web service is used in the learning process to form a systematic view of historical processes in students [5].

The generated timelines can be embedded in HTML code for online courses or web pages, or viewed using links.

In this case, students can create a single infographic image of different information:
- chronological and periodic
- information handling skills
- Complete mastery and generalization of the topic
- Allows you to view the information provided.

Currently, there are several Internet services that create a timeline. However, there is no timeline in Uzbek. Services that allow you to work in other languages include Dipity (http://www.dipity.com), TimeRime (http://www.timerime.com), Tiki-Toki (http://www.tiki-toki.com) and others .

As an example, we can see the timeline for the topic 'History of personal computers' in computer science (Figure 1).
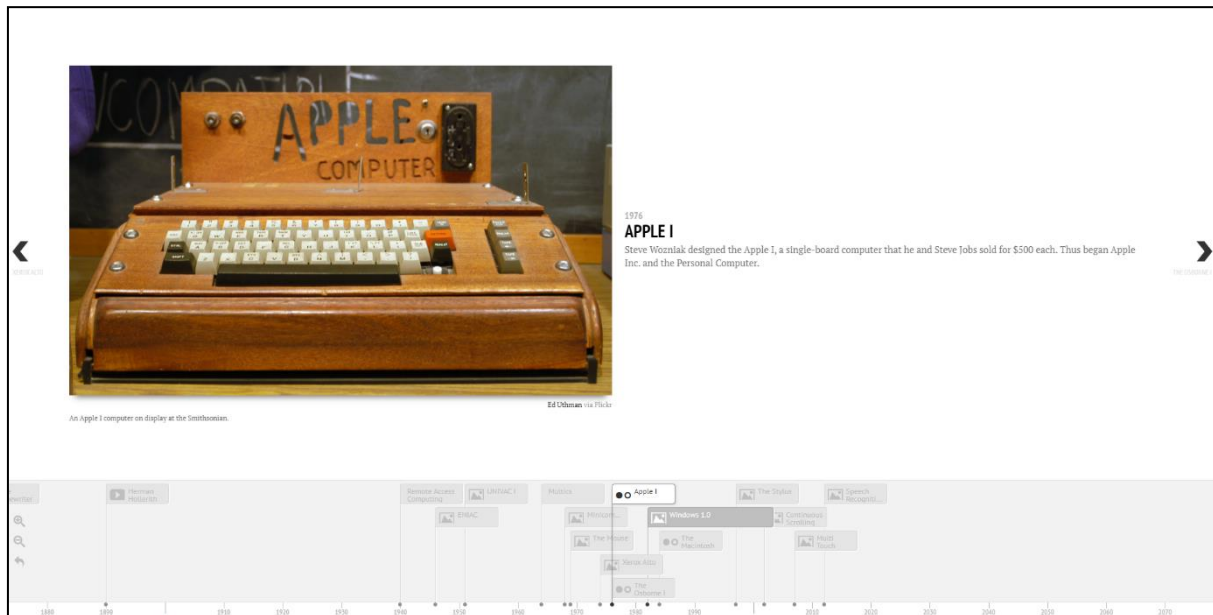
Figure 1. Personal Computer History Timeline

Here are some suggestions on how to look or get an appointment for computer science. These are:

1. By giving assignments for independent performance. Assignments can be made in the form of short descriptions of the most important dates on the topic, creating timelines on an independent topic, and distinguishing and analyzing the significance of events.

2. In assessing knowledge. The chronological arrangement of events, that is, the correct sequence of events, is evaluated on the basis of their importance and how they reflect the interactions of the studied processes.

3. When working in groups. Each student is given a separate topic, a timeline is created, and the timelines prepared by all students are summarized and used to fully understand and comprehend historical events. Any visual information helps to capture the reader's attention [6].

Understanding the representation of complex processes is simplified using simple elements, graphs, or combinations of diagrams [7].

This interactive tool can be used not only in computer science classes, but also in any subject.

Because any other optional subject also contains important dates and periodic information. The use of an interactive timeline tool for learning and understanding such information is effective in teaching.

In short, the timeline interactive service is one of the most innovative ways to deliver learning materials to students. These timelines serve as a simple tool that does not require specific knowledge to make learning more creative and productive.

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