USE OF WEB TECHNOLOGIES IN EDUCATION

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Abstract: This article describes the concept of web technologies and the development of these technologies, as well as platforms that prepare educational resources based on web technologies.

Keywords: Web technology, WWW, Web 1.0, Web 2.0, Web 3.0, Storybird, Kahoot, Animoto, eduClipper.

INTRODUCTION

The modern educational process, which is implemented in the conditions of informatization of all spheres of society's life, requires the development of educational resources in a completely new direction. First of all, this is evident in the introduction of modern web technologies into the educational process.

LITERATURE ANALYSIS AND METHODOLOGY

What is web technology: Web technology refers to the various tools and techniques used in the process of communication between different types of devices over the Internet. A web browser is used to access web pages. Web browsers can be defined as programs that display text, data, images, animations, and videos on the Internet. Hyperlinked resources on the World Wide Web can be accessed using software interfaces provided by web browsers.

World Wide Web (WWW): The World Wide Web is based on several different technologies: web browsers, Hypertext Markup Language (HTML), and Hypertext Transfer Protocol (HTTP).

Web Pages: A Web page is a digital document that is connected to the World Wide Web and can be viewed by anyone connected to the Internet with a Web browser.

Web Development: Web development refers to the creation, creation, and maintenance of Web sites. It includes aspects such as Web design, Web publishing, Web

programming, and database management. This is the creation of software that works over the Internet, that is, Web sites. [1]

The World Wide Web, often referred to simply as the Internet, has undergone several transitions in its history and continues to evolve to this day. The Internet was not born at the same time as the Internet itself. Early iterations of the Internet relied on text, limited user interaction, and lacked a simple way to browse sites. The creation of the Internet in 1989 changed the direction of the Internet from a tool used by researchers, academics, and technical users to a technology anyone can use to browse Web sites and access information anywhere. Since then, web technologies have evolved and expanded, adding new ways for internet users to interact. The Internet has become the catalyst of the modern digital economy.

It is generally accepted that there are three main evolutions of the Internet, which are simply referred to as Web 1.0, Web 2.0, and Web 3.0. As interest in Web 3.0 grows as blockchain and security technology become more popular , it's important to look back at previous generations and compare them to the next.

Web 1.0: Reading (1989-2005). Web 1.0, also known as the Static Web, was the first and most reliable Internet of the 1990s, offering limited access to information, albeit with very little user interaction.

Web 2.0: Literacy (2005 to present). The social web or Web 2.0 has made the internet more interactive thanks to advances in web technologies such as Javascript, HTML5, CSS3, etc., which have enabled startups to create interactive Web platforms such as YouTube, Facebook, Wikipedia, and many others.

Web 3.0 (or Web3): read-write-own. Web 3.0 is the next stage in the evolution of the Web, which will make the Internet smarter through the power of artificial intelligence systems that can run intelligent programs to assist users, or process data with human-like intelligence.[2]

Education, technology plays a key role in the processes of teaching children and adolescents. Hundreds of digital learning tools have been created to empower students,

improve learning management, encourage collaboration, and facilitate communication between teachers and students. Here we present 4 of the most popular.

Storybird. Storybird aims to develop students' writing and reading skills through stories. In this tool, teachers can create interactive and art books online through a simple and easy-to-use interface. Created stories can be blogged, emailed, and printed, among other options. In Storybird, teachers can create projects with students, provide ongoing feedback, and organize lessons and assessments.

Animoto. Animoto is a digital tool that allows you to create high-quality videos in a short amount of time and from any mobile device, inspiring students and helping to improve academic lessons. Animoto's interface is user-friendly and practical, allowing teachers to create audiovisual content tailored to their educational needs.

eduClipper. This platform allows teachers and students to share and learn about references and study materials. In eduClipper, you can collect information found on the web and then share it with members of previously created groups, which will help you more effectively manage academic content found online, improve research methods, and have a digital record of student achievement. allows to Likewise, it allows teachers to organize a virtual classroom with their students and create a portfolio where all completed work is stored. [3]

Kahoot. Kahoot is an educational platform based on games and questions. Through this tool, teachers can create quizzes, discussions or quizzes that complement academic lessons. The material is projected in class and the questions are answered by the students while playing and learning at the same time. Kahoot promotes game-based learning that increases student engagement and creates a dynamic, social, and engaging learning environment.

RESULTS

Open source tools give teachers and students worldwide the freedom to teach and learn without limitations. Let's see how open source software can help you achieve better results.

Why Choose Open Source Tools?

Currently, digital transformation has become one of the most important trends in education, especially considering the situation that is happening around the world. With quick and constant access to learning content, you can learn and complete tasks from anywhere. And we know that situations often call for it. With the help of e-learning tools, we can meet the latest demands of the education sector. But why are so many educational institutions choosing open source software for their learning process?

Here are 3 main reasons:

1. Security. Although it may sound counterintuitive, we don't stop at saying that security plays an important role when choosing educational software. Sensitive student and teacher information must be protected at all times. With open source (and it would be even better with self-managed tools), you have full control over sensitive data and can be sure that it is protected from possible threats.

2. Flexibility. With open source products, you can easily add additional functionality that you may need for teaching and learning. Most importantly, the community behind open source projects; they often contribute to product development by bringing new ideas and functionality. Also, if you already use open source software, you can generally integrate it with other open source tools.

3. Economic efficiency. We cannot deny that the cost of software is an important consideration for many educational institutions. Some of them, especially the smaller ones, often have tight budgets for IT equipment and infrastructure. No wonder they choose free open source software instead of wasting their entire budget on expensive apps. [4]

DISCUSSION

The globalization of education has already required the use of digital technologies. There were online platforms to conduct classes, share resources, evaluate and manage the day-to-day activities of academic institutions. However, the use of these platforms was active. The COVID-19 pandemic has forced institutes to adopt online mode of education to maintain the education system. Developed countries were

better equipped to deal with this crisis. However, developing countries have worked hard to meet this demand. Digital technologies have emerged as the savior of education in this critical era [5]. This global crisis emphasizes the need for international integration into the education system. Digital technologies help students develop skills required for professional activities, such as problem solving, structuring thinking, and understanding process. They are also preparing for an unpredictable and changing future in which technology plays an important role. The acquired qualities and abilities of students are important for their professional success. Educational resources and digital tools help improve the classroom environment and make the learning process more engaging. In addition, they provide each educational institution with greater flexibility and adaptation of the curriculum based on the needs of each student [6].

If technology is used in the classroom, children can be more engaged in learning. Since today's youth are very accustomed to using electronic gadgets, including them in their school education will surely help to stimulate their interest and increase their activity level. Integrating technology into education provides students with an engaging learning experience , allowing them to engage with the subject without distraction. The use of projectors, computers and other modern technical equipment in the classroom can make learning fun and interesting for students. Student learning can be more dynamic and engaging by setting up tasks that include technology resources, oral presentations, and group participation in the classroom. Participation may extend beyond verbal communication [7].

Using computers and other devices together with digital tools allows students to play a more active role and be at the center of the process. The teacher is a guide in this process and can confirm the effectiveness of learning. Using a large number of digital resources, students can download the information they need or upload their own content. Web 2.0 technologies (wikis, podcasts, blogs, etc.) help students create content, collaborate with others, evaluate each other's work, and learn together. Digital technologies in class o ' yin like transfer from tactics to use makes it easier to learn optimizer converted classes such as approaches . The study of landscapes has evolved

as a didactic tool, combining several techniques to provide individual itineraries for each student. Technology makes instruction more inspiring and meaningful [8].

CONCLUSION

In short, web-based educational resources are perfect for teachers and students because they make learning fun and engaging. Web technologies are becoming an important part of everyday education and training in many parts of the world.

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