Література

- 1. Керівництво з програмування на С# [Електронний ресурс] Режим доступу: https://msdn.microsoft.com.
- 2. Створення додатків Windows Forms y Visual Studio з С # [Електронний ресурс] Режим доступу: https://docs.microsoft.com/en-us/visualstudio/ide/create-csharp-winform-visual-studio?view=vs-2019.
- 3. Бази данних і мова SQL [Електронний ресурс] Режим доступу: https://function-x.ru/sql_join.html.
- 4. DataSets, DataTables, and DataViews [Електронний ресурс] Режим доступу: https://docs.microsoft.com/en-us/dotnet/framework/data/adonet/dataset-datatable-dataview/.

ASTISTOVA T.I., VARGACH O.S. WEB RESOURCE DEVELOPMENT FOR ONLINE COURSES

АСТІСТОВА Т. І., ВАРГАЧ О.С. РОЗРОБКА ВЕБ-РЕСУРСУ ДЛЯ ОНЛАЙН КУРСІВ

Анотація. У статті представлено аналіз використання веб-ресурсів як інструменту та платформи для навчання. Розвиток доступності інформаційних технологій відповідає розвитку суспільства і виникає потреба в механізмі засвоєння інформації . З огляду на розвиток технічного та інформаційного прогресу, виникає потреба в інтенсивному впровадженні освітніх засобів і платформ, використанні сучасних інформаційних технологій та веб-технологій.

Ключові слова: веб-ресурс, інформаційні технології, освітні засоби, Web 2.0.

Introduction

The development of society in the world today inevitably depends on the growth of information technology, they change the learning process using modern techniques and innovations. And thanks to this, the learning process has been simplified. The Internet, on the other hand, contains a great deal of information and access to it and other useful resources should be unhindered and used to acquire new knowledge, as well as to teach this knowledge in an understandable form. The transition to digital learning technologies requires the application of new approaches to the organization of the educational environment, the creation of an online model of learning and an open and flexible information and educational environment. The educational web space will provide comfortable conditions and mobility of learning and ease of teaching to all participants in the educational process.

Main part

In recent decades, people have begun to study the use of technology in the educational process. Teaching and learning processes require techniques for developing modern teaching methodologies . Technology has expanded basic educational resources so that they are available anywhere. The learning process has been greatly simplified thanks to these developments. Open source and knowledge bases are designed not only to provide enough knowledge for students, but also for everyone. This rich resource requires critical evaluation and thinking strategies for optimal use in the right direction.

Available resources need to be collected and used in appropriate ways in knowledge management processes. They should communicate with learning processes in known ways to acquire knowledge. Current learning processes require different tools for self-learning.

Faux and Hughes [2] conducted a study to determine the effectiveness of the Internet as the main method of teaching. They found that students prefer online learning and learn better than with the traditional teaching method.

Geith and Vignare [3] studied the growth of open educational resources and online learning to bridge the global education gap. They tested the funding and financial sustainability of online learning. According to White and Manton [4], digital resources are commonly used to support teaching and learning in higher education. Reusing and redesigning online resources should be easier and safer.

Based on this, we can highlight the benefits of web resources. Students studying online have the opportunity to freely plan and create a schedule. Students have the opportunity to adjust the workplace to their own preferences. Online learning is more cost effective. Save student time, because standard training takes more time.

At the same time, the analysis of the advantages showed the disadvantages of web resources for learning. Teachers in traditional classes can immediately provide feedback to the student. Lack of direct interaction between people. But one of the biggest drawbacks is lack of self-motivation ounces and improper time management.

Considering existing learning management systems, such as Moodle, which is now considered the most advanced, it is possible to highlight its shortcomings before the web resource that will be created. Moodle is more difficult to configure, some functions are more difficult to perform, but it could be confusing, as well as the lack of full support. The development system bypasses these shortcomings and is more user friendly.

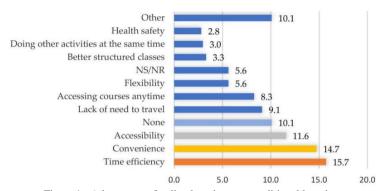


Figure 1 - Advantages of online learning over traditional learning.

Most web-based educational resources are published on the Internet through web-based educational sources, which provides a significant expansion of theoretical mastery of the discipline and the organization of effective forms of learning activities for self-accumulation of knowledge, skills and abilities.

The active use of Internet technologies in education has become possible due to the intensive development of Web 2.0 technologies. Interpretation of the concept of web -technologies is associated with methods and means of creating web -pages with multimedia support. For students, the advantages of using Web 2.0 technologies are a higher degree of autonomy in mastering the discipline, the opportunity to learn independently and at a convenient time, in terms of distance learning.

Website design is one of the most important techniques for developing web resources.

WordPress was chosen for the work , a system used for dynamic recovery and editing of CMS content. WordPress creates everything from simple websites to blogs to complex portals, company websites and even applications. This makes it flexible and easy to use. There are literally thousands of plugins that extend the functionality of WordPress , so the actual functionality is almost limitless. You can also do anything with the WordPress code , extend it or change it in any way. Experienced developers need a WP - designer , this open source engine and detailed documentation allows you to improve the functionality of the project. WordPress closely integrates the main programming languages you can work with: HTML, CSS, JavaScript and PHP. WordPress uses PHP on the server to perform all major tasks and to write most WordPress files , including base files, theme files, and plugins. The CMS also requires a database to store all data, such as content and user information. To do this, WordPress uses MySQL , which is a relational database management system. MySQL is open

source, making it ideal for WordPress . Like PHP, MySQL is supported by most web hosts . So, you can install WordPress on almost any host .

WordPress uses many other small PHP and Javascript libraries in its core. In addition, when installing plug-ins, they can also include the library itself.

Conclusions

The introduction and use of web resources for learning is already an integral part of education, and development trends show great prospects at the level of traditional forms of learning. The biggest advantage of online learning is accessibility for everyone, regardless of location. Flexibility in planning and creating individual schedules and approaches to learning. Everyone can create comfortable working conditions for themselves, which can help improve the quality of education. The main negative factor in the use of Internet resources as tools for learning may be the lack of interest and motivation of students to learn independently. Therefore, the introduction of new clear and simple online resources for education can help solve these problems.

Literature

- 1. Alkhafaji S. Using Online Learning Resources . [Electronic resource] // Proceedings of the 2nd BCS International IT Conference 2014. Resource access mode: https://www.researchgate.net/publication/336586655_Using_Online_Learning_
- Resources_A_Self_Learning_Tool.

 2. Faux T. A Comparison of Using the internet versus Lectures to Teach
- 2. Faux 1. A Comparison of Using the internet versus Lectures to Teach Social Work History . Research he Social Work Practices . / T. Faux , Hughes . // CB. 2000. №10. P. 454–466.
- 3. Geith C. Access to Education with Online Learning and Open Educational Resources / C. Geith , K. Vignare . // Journal of Asynchronous Learning Networks . №12.
- 4. White D. OER The Value of Reuse in Higher Education . Report . / D. White , M. Manton . // Department of Continuing Education , University of Oxford .. 2011.

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DEVELOPMENT OF SOFTWARE FOR DETERMINATION OF ECOSYSTEM INDICATORS IN INDOOR

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РОЗРОБКА ПРОГРАМНОГО ЗАБЕЗПЕЧЕННЯ ДЛЯ ВИЗНАЧЕННЯ ПОКАЗНИКІВ ЕКОСИСТЕМИ В ПРИМІЩЕННІ