

THREE-COMPONENT DIGITAL ENVIRONMENT FOR LIFE LONG LEARNING SUPPORT

Voychenko O., researcher

International Research and Training Center for Information Technologies and Systems
alex_p@mail.ru

Effective support of LLL in case of rapid progress in IT requires new approaches. The traditional implementation of learning support based on the LMS types of systems has several drawbacks that hinder many benefits offered by modern ICT. In particular, their rigid access policies, traditional ways of learning resources management, as well as limitations to the organization of collaborative work in the framework of traditional LMS do not fully meet current challenges to the LLL support systems.

One of the solutions could be a technological improvement of the existing LMS, however, it does not seem very promising, as the developers are bound by the limitations of the LMS-centered paradigm for distance learning.

More promising is an approach based on the construction of multi-component learning environments. In such environments it is possible to integrate several originally independent information systems that implement various ideologies and educational paradigms.

In this paper we consider an environment consisting of three components: the traditional LMS (MOODLE), a repository of articles based on the wiki and communication components based on wordpress as an example. This is an extension based on the successful experience of operating a two-component environment (MOODLE + wiki) which is intended to meet new challenges (such as a need for more advanced interactive communication tools to support growing collaboration among users).

In addition, there was a need for better support of managing multimedia resources, opportunities for distributed heterogeneous educational content aggregation and embedding, such as videos from Youtube or presentations from the Slideshare. Among others, there was a claim to establish integration with the microblogging service Twitter.

After analyzing the new challenges, we decided to add to the environment an entirely new component that would allow on the one hand, expanding communications capabilities, and on the other – providing wider support for the use of multimedia resources.

The LMS component provides a set of standard functionality to support traditional forms of distance learning. It ensures a strict regulation of students' access to the learning content of courses and knowledge evaluation tools. Strict information policy makes LMS an optimal choice in case of the use of some proprietary learning content.

A component based on wiki supports collaborative work that is not limited by the group of students of the same course and makes its results available to all for a long time.

A Wordpress-based component provides for the additional functionality, which is offered neither by LMS, nor by wiki: it combines high accessibility, ease of new content creation, more flexible interactive communication tools comparing to wiki's, support of variety of extensions (plug-ins) and easy and simple integration with third-party services (such as Youtube, Twitter, Live video broadcasts, etc.).

Using the combined potential of the three systems in one learning environment allows meeting fundamentally new challenges in support of the LLL. With a three-component environment it becomes possible to flexibly combine training activities with research.

The suggested approach opens new promising prospects of future enhancement of capabilities for wide, effective and innovative LLL support.

References:

1. Kateryna Synytsya, Oleksiy Voychenko "Web 2.0 based LMS extension for life long learning support". Proceedings of Elearning and software for education international scientific conference, April 28-29 2011 Romania, Bucharest, p.149-154.

Електронні засоби та дистанційні технології для навчання протягом життя : тези доповідей VIII Міжнародної науково-методичної конференції, м. Суми, 15–16 листопада 2012 р. – Суми : Сумський державний університет, 2012. – С.107-108.