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Academic discipline website as an efficient aid for didactic adaptation of first-year students

Problem statement

The way people interact with society is being continually and radically changed due to the significant breakthrough in information technologies, which enables the Ukrainians to participate in political, economic and cultural life throughout the world. Therefore the major task of higher education today is to train students to be active in the course of high-quality development of modern society, to form students' need in continuous self-improvement, and to promote lifelong self-learning.

Under the transition of Ukraine's educational paradigm from authoritarian to humanitarian, educators find it necessary to reexamine the training system in whole: its objectives, syllabi, instructional methods, and organizational forms. Ukraine's higher educational institutions tend to consider the personality-oriented approach a priority. This is primarily explained by the changes in the society's social order for graduates' personal skills, which include:

- independency in decision-making,
- ability to be responsible for their decisions and behavior,
- tolerance,
- ability to work in unusual conditions,
- competency in both their occupation and other fields of knowledge [Полар 2007].

Nowadays, topical is the issue of adaptation of university students. However, the problem of adaptation of first-year students has not been analyzed and studied to the full. It is caused, first and foremost, by the presence of two lines of innovative activity development (a concept-based one, and description of application and impact of certain innovations on student's learning along with his adaptation to the educational process). Unfortunately, scholars have not succeeded either in combining these lines or providing scientific arguments for the problems of innovative education [Матвеева 2008]. Therefore, researchers in the field of pedagogy and psychology keep on finding the ways of rationalization of educational process, in particular, intensification of adaptation of first-year students to the new didactic conditions.

The aim of the article

Describe the technology of creation of academic discipline website, which is supposed to intensify didactic adaptation of first-year students of higher technical educational institutions.

Presentation of the basic material

Teaching-learning process in higher educational institutions is a complex dynamic system, which depends on a number of interconnected external and internal factors having an impact upon both molding students into professionals and their adaptation to the educational process.

On entering a university, freshmen become aware of the new way of life and peculiarities of learning organization, which they find strange and unusual. Having encountered the new routine, freshmen feel an imbalance between the volume of curricular material and the already formed physiological resources of their organisms, required for processing instructional information. This period of student's life is characterized by intense neuropsychic stresses as well as stresses caused by a more intensive rhythm of activity, that directly influence on work capacity.

Proper attention should be given to didactic adaptation, i.e. adaptation of students to the new learning conditions established at higher educational institutions. It is related to students' lack of ability to organize their unsupervised work, lack of summarizing skills, inefficient retrieval of educational, reference and bibliographic literature, lack of ability to adjust to new forms and types of control, which substantially differ from those used at comprehensive school, etc. For this reason it is intensification of adaptation processes of first-year students that becomes priority.

Thus, wide application of academic discipline website is believed to efficiently accelerate students' adaptation to the new learning conditions. The idea of such websites belong to American developers was pioneered introduction of this technology into every lead university of the country.

Nevertheless, we cannot assert that it is commonly used at Ukraine's higher educational institutions. According to the data of the survey conducted in Ukraine by TNS marketing company by March, 2012, near 50% of country's 15+ population have an access to the Internet. 31% (12,4 million) from among them use services of the global network daily, or almost daily. The amount of users increases by more than 10% annually, since they are enabled to implement their economic, social and educational projects.

In order to ascertain how much the Internet is used by first-year students, we have interviewed more than 200 university students. Being asked what sources of information they use when sitting for their classes, 92% of interviewees named the Internet (for comparison, library is used by 6% only). This fact indicates that the process of autonomous learning has actually moved from the so-

called „university area” to the global network. The rate of usage of the Internet by first-year students of higher educational institutions is shown in fig. 1.

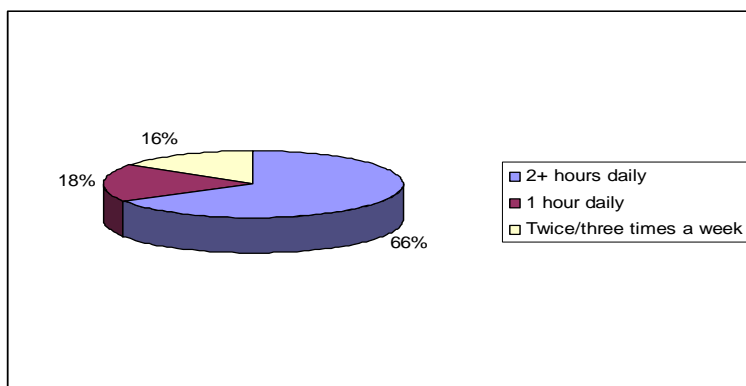


Fig. 1. The rate of usage of the Internet

Consequently, it is essential to provide students with informative support by creating academic discipline websites.

The content of a website can be de bene esse divided into required and optional components. Required component implies:

- syllabus;
- lesson schedule;
- lectures texts with proper presentations and methodical materials developed by means of computer algebra systems so that to visualize all task-solving processes;
- lecture theme and tasks for both practical classes and independent work;
- list of recommended literature and Internet-resources;
- brief instructions for handling educational literature, summarizing, organization of independent work, and effective time management.

Optional component may include video recordings of lectures and practical classes, various psychological tests for teacher to control the process of students' adaptation (with further obligatory display of the results), academic achievement tests, electronic variant of progress register, professional information, electronic library and the like.

The syllabus site must have its forum or chat. Forum and chat enable students to consult each other, to pass opinions and put forward ideas for efficient independent work and task-solving; to get on-line teacher's advice; to show the results of their researches etc. On forums teacher can ask problem questions, provide information concerning students' conferences, exhibitions, seminars to be held either at a university or elsewhere. Video recordings of lectures and practical classes are regarded to be a powerful stimulus to study. When students

take a detached view at learning activity they can evaluate their own achievements objectively. Moreover, video recordings of other students' performance offer strong incentives to study, lower anxiety and make teaching-learning process transparent, being an original positive advertising of both a teacher and higher educational institution on the whole.

The syllabus site must become the very environment for students to be instructed on how to arrange their learning activity, to find answers for questions arising in the process of work, and to make up for deficiencies in their theoretical knowledge.

Today, creation of such sites depends upon teacher. He can be assisted by content management system (CMS) which is a complex program for creation and support of Internet-based projects of any complexity. CMS provides users with essential visual facilities for creating interactive website pages. The content can be quite flexible due to the built-in in word processor. In addition, CMS offers users a wide range of supplementary tools, such as management of website users, publication of news or articles, forums, blogs, galleries, boards etc.

CMS is advantageous for:

- prompt information updating directly carried out by an authorized employee;
- reducing the cost of support in case information is updated by users;
- additional tools such as searching, forums, voting and the like, which make users interactively co-operate with them (these tools are already realized within a CMS);
- reducing the development time since the design of a CMS offers this option;
- upgrading the quality of website development so long as here used are (either partly or fully) the modules which have already been thoroughly tested.

These days, the CMS market has a wide spectrum of offers for both commercial and freeware (Drupal, SilverStripe, 4SiteCMS, 2z project, DOTCMS, OpenCms) [Пелещишин 2007].

In our opinion, CMS Joomla is the most efficient, most powerful and most common website management system. It enjoys wide popularity owing to its:

- simplicity in use;
- reliability and effortlessness in installment along with unique functionality;
- availability of modifiable menu;
- capacity for multilevel authentication of both users and administrators;
- facilities for modifying the existed units as well as adding some new ones;
- ability to manage the website blocks;
- availability of a forum, which designed for polling and voting;
- clear structure;
- facilities for programming of the beginning and the end of publication of materials according to the calendar;
- availability of a large amount of modules, and image library.

Conclusions

Thus, the intensive use of the Internet, creation of academic discipline websites and their introduction into the educational process of higher educational institutions intensify didactic adaptation of first-year students. Such websites can serve as an „area” where students’ independent work is organized and controlled, and its efficiency, beyond all doubt, will strengthen, with video and audio materials (results of learning activity) to advertise higher educational institutions to the greatest extent.

Literature

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Abstract

The article deals with the problem of intensification of didactic adaptation of first-year students. The analysis of the research into the use of the Internet and accessibility of CMSs stipulated the devisal of methodology for creation of academic discipline websites which are believed to facilitate students’ adaptation to the new learning conditions at higher technical educational institutions.

Key words: didactic adaptation, first-year students, academic discipline website, CMS, CMS Joomla.

Uniwersytecka strona internetowa jako skuteczna pomoc dydaktyczna dla adaptacji studentów pierwszego roku

Streszczenie

Artykuł przedstawia problem możliwie szybkiej adaptacji dydaktycznej studentów pierwszego roku. Analiza wyników badań nad wykorzystaniem Internetu i dostępnością technologii CMSs ukierunkowuje prace w tym zakresie na utworzenie uniwersyteckiej strony internetowej, która może okazać się ułatwieniem

w adaptacji studentów do uczenia się w nowych warunkach w wyższych uczelniach technicznych.

Słowa kluczowe: adaptacja dydaktyczna, studenci pierwszego roku, uniwersytecka strona internetowa, CMS, CMS Joomla.