E-learning Practices at University Libraries

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ABSTRACT

The paper presents the use of E-learning in teaching, with particular emphasis on education conducted as a part of the didactic activities of the university libraries. The article characterizes the specificity of the university libraries and their role in education. The offer of e-learning courses in the university libraries is also presented. The work mainly focuses on the offer of e-learning courses at the public universities in Poland. The analysis was based on a review of websites related to the studied libraries. The purpose of the analysis was to assess the use of e-learning by libraries, check the availability of training offered and the ease of finding them on the library websites. The number of courses offered and their topics were also examined. Furthermore it was taken into account to whom the prepared courses were addressed. The paper presents current practice, possibilities and the authors' proposals for further development of these websites. The presented proposals are based on the growing technological possibilities with increasing access to the Internet.

INTRODUCTION

The development of the Internet through the expansion of ICT networks, increasing the bandwidth and improving accessibility to it make the potential students' expectations in reducing the need to commute to classes and lowering the cost of studies, as well as free planning of the dates of their classes increasing. This is facilitated by the development of browser based educational applications and supporting software. This also confirms the development of distance learning in recent years. The university's offer should keep up with the expectations and technical possibilities.

Academic e-learning has been successfully developing in all Polish universities for many years. Despite the lack of systemic solutions and legislative support, a very large number of academic centers in Poland have already had their first experience in the field of e-education. The role of e-education is increasing, both in the field of complementary education and in the organization of courses and entire studies. Therefore, e-learning is becoming an integral element of the university's education

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and virtualization process. All this indicates that the phase of the mature development of academic e-learning in Poland is approaching.

The aim of the research is to assess the use of e-learning by the university libraries, check the availability of offered training and the ease of finding them on library websites. As part of the work, the number of offered courses and their topics were also verified.

CHARACTERISTICS OF E-LEARNING SYSTEMS

The very term E-learning does not imply that distance learning is intended to completely replace traditional classes. There are many definitions of E-learning in the literature. Generally E-Learning relies on the use of information and communication technologies (ICT) to increase access to education and to strengthen and transform teaching and learning.

According Selim [1], e-learning can be defined as providing educational content using telecommunications technologies. This means that we support or carry out the teaching process using personal computers, smartphones, tablets and the Internet. The possibility of using mobile devices is referred as m-learning and is designed to allow to use learning content at any time, e.g. while traveling, to assimilate prepared content.

In this way, we can complete courses, trainings, and in some cases also studies without being physically present in class. This enables a flexible approach to teaching (the participant chooses a time convenient for him), reduces the costs of courses or studies, and also gives the opportunity to use various tools:

- multimedia
- animations
- video streaming
- synchronous lectures
- interactive tasks, also in the form of games with other course participants
- tests checking the assimilation level of a certain range of material

The implementation of E-learning tools does not mean that it is necessary to completely abandon traditional teaching. To avoid a complete lack of direct contact with a teacher, which is considered to be a basic disadvantage of E-learning, and to allow more complete verification of an identity of people participating in the courses, blended learning is used. A typical division of education into traditional and E-learning related education is presented by Mark Bullen [2] (Fig. 1).

Figure 1. E-learning in education [2].
Allen, Seaman and Garrett [3] define type of course according to proportion of content delivered online (table 1).

Table 1. Type of course on the base of course delivery method [3].

| Proportion of Content Delivered Online | Type of Course     | Typical Description                                                                 |
|--------------------------------------|--------------------|-------------------------------------------------------------------------------------|
| 0%                                   | Traditional        | Course with no online technology used content is delivered in writing or orally.     |
| 1 to 29%                             | Web Facilitated    | Course which uses web-based technology to facilitate what is essentially a face-to-face course. Uses a course management system (CMS) or web pages to post the syllabus and assignments, for example. |
| 30 to 79%                            | Blended/Hybrid     | Course that blends online and face-to-face delivery. Substantial proportion of the content is delivered online, typically uses online discussions, and typically has some face-to-face meetings. |
| 80+%                                 | Online             | A course where most or all of the content is delivered online. Typically have no face-to-face meetings. |

Sharifabadi specify different terms that are commonly used in e-learning field [4]:
- online learning
- internet learning
- distributed learning
- networked learning
- tele-learning
- virtual learning
- computer-assisted learning
- web-based learning
- distance learning.

You should also pay attention to the trends that appeared along with Internet 2.0 and initiated the idea of a new generation of E-learning. E-learning 2.0 emphases on use of social learning, and tools such as blogs, wikis, podcasts, and virtual world such as second life (compare [5]). According to Craig [6] new generation learners are influenced by social networking. These learners are ready to create, publish, and redistribute own contents.

Leszek Kozioł points out that new IT solutions in e-learning should be introduced slowly and carefully, leisurely with their introduction. The first experiences and reactions of people, program beneficiaries, which strongly influence its implementation and functioning are important[7].

A different problem related to E-learning is a possibility of reproducing someone else's studies. On the one hand, there are aspirations for openness and cooperation; for example, Baraniuk [8] claims that: “Knowledge should be free and open to use and reuse; that collaboration should be easier, not harder; that people should receive credit and kudos for contributing to education and research; and that concepts and ideas are linked in unusual and surprising ways and not in the simple linear forms that today’s textbooks present”. On the other hand, the rights of people who prepare their lectures and exercises should be guaranteed.
UNIVERSITIES E-LEARNING PLATFORMS

In higher education, the tendency to create Virtual Learning Environment (VLE) is increasing [9]. VLE in combination with Managed Information System (MIS) define Managed Learning Environment. Usually in this environment information related to the course are transferred through the user interface conforms to the standards of the university. It is many examples of such practice in literature, e.g. Weller presents how Virtual Learning Environments can be successfully used for effective teaching in universities and colleges [10].

In many countries university libraries introduce e-learning as an important part of their activities. Typically in e-learning learners are usually remote, but in some situations can also include use of in-library computers and networks.

Marshall Breeding presents US example of benefits of such direction:
- Continue working while pursuing educational advancement
- Common in US for library support staff to advance to professional positions after completing online MLIS (Master of Library and Information Science) program.
- Non-residential programs reduce educational costs.
- Can be paced to accommodate other work or family obligations [11].

More and more universities, also in Poland, offer selected diploma programs on many levels and in many fields via the Internet. Usually, students are required to attend classes, but many courses are provided only via the Internet. An interesting example of using e-learning can be found at the Warsaw School of Economics (SGH). The university has created an e-sgh platform for online education, which is available in Polish and English language versions (Figure 2.) [12]. The platform was built in PHP using the MySQL database. The content of lectures is created and stored in XML format. The open architecture of lectures also allows publishing content in other forms, e.g. in the form of an e-book viewed offline or in a form prepared for printing.

At the beginning research, it was verified whether Polish universities have e-learning platforms. The research has shown that out of 17 universities from the list based on the Ministry of Science and Higher Education [13], most, meaning 15, have e-learning platforms. The two others are in the process of implementing projects aimed at improving the quality, effectiveness, accessibility of the university education and management system, and raising the competences of staff in the higher education system by introducing e-learning platforms. In addition, as part of the projects, modification of education programs including e-learning will be implemented, as well as support for IT tools for managing education at universities by implementing e-learning platforms. It can therefore be assumed that in the nearest future e-learning will be available at all universities studied.
E-learning platforms can be divided into commercial, paid-for and open source platforms, where the source code is open. Users choose open source platforms because of the costs. The dominant among them is the Moodle (Modular Object-Oriented Dynamic Learning Environment). The Moodle platform is probably the most popular Learning Management System (LMS) in the world. Although, according to some reviews, other e-learning platforms offer better functionality, Moodle meets the needs of most users. Joseph Thibault after analyzing different user opinions consider that the majority of Moodle users (teachers and students) approve the Moodle [14]. Characteristic of this Learning Management System is very rich. Some of Moodle features include:

- Assignment Submission
- Discussion Forum
- Files download
- Grading
- Moodle Instant messages
- Online calendar
- Online news and announcement
- Online quiz
- Wiki [15].

Thirteen of the seventeen analyzed universities e-learning platforms are based on Model. University of Białystok use Blackboard Learn base system—competitor of Moodle (Figure 3). Unfortunately, the available language selection does not fully change the language of the website interface. Blackboard Learning System, first available in 1998, is constantly developed learning management system that provides courses delivery and management for institutions. It is also a content management system for centralized control over course content and a system for recording and analyzing student assessment results. Developers are able to extend the functionality of the system, and create customized course management.
University of Rzeszów use WBTServer platform. It is also LMS platform which supports any course type—SCORM (Sharable Content Object Reference Model), video, document, webinar, classroom, blended and others.

At all universities surveyed login to e-learning platforms is required. There is also a trend to make courses offered by universities available to interested persons from outside the university. In University of Silesia in Katowice, to admitt the free courses all one must do is to make a one-time user registration by completing the form. Similarly, you can take courses at University of Rzeszów and University of Wrocław. An interesting solution was used at the Jagiellonian University. Three e-learning platforms operate: Pegaz—focused on the didactic needs of the university, i.e. conducting remote classes and presentation of didactic materials, Krakus—containing additional courses for students and students of schools cooperating with the Jagiellonian University, Jaszczur—intended for training for employees and the Jagiellonian University without Borders—an Open Educational Resources containing materials and courses for anyone interested. The first three require login, while the last one is available to everyone. The ability of users to take e-learning courses depends on the ease of finding them on university websites. Usually students and employees of a given university have no problem with this, but for an outside user, in some cases it is not so simple. The perfect solution can be found at the University of Białystok, which has placed the "E-learning" tab on the home page. On the main webpage of Maria Curie Skłodowska University in Lublin, a "Virtual campus" tab has been placed redirecting to e-learning courses. On the University of Lodz website, the e-Campus tab leads to e-learning resources. Access to these resources is integrated with logging into the main university system. In the case of other universities, redirection to remote courses is done using the tabs: "Teaching", "Training and courses" or through the "Student" tab in the case of the University of Warsaw, where operates General University E-learning Platform.
“Kampus” provided, developed and maintained by Digital Competence Centre of University of Warsaw (compare figure 4). The main duty of the Digital Competence Centre is to use new technologies in the university education, including e-learning as a method of education which improve the access to didactic offer.

Figure 4. “Kampus”—General University E-learning Platform of University of Warsaw [17].

OVERVIEW OF E-LEARNING SERVICES IN UNIVERSITY LIBRARIES

The next research goals were finding answers to the following questions:

• do libraries use university platforms to run e-learning courses
• whether they serve not only university employees and students, but also outsiders
• what is the thematic scope of training offered
• is it easy to find e-learning courses on library sites

The analysis of university libraries' websites shows that 13 of them offer their users e-learning courses which are placed on home university e-learning platforms. It can therefore be concluded that university libraries largely use the potential of university platforms to conduct their courses. As in the case of logging in to university platforms in many libraries, this requirement is also maintained, but there is a noticeable trend of opening up to external users, too. This is undoubtedly a valuable initiative which extends the number of potential users, it is also a part of the promotion of the library, which appears as an open institution.

E-learning courses are much easier to find on library websites. As in the case of the University of Wroclaw Library, the "E-learning" tab leads to them, facilitating navigation and finding courses. The University of Gdańsk Library has placed the "Online Training" tab on its website, which leads to the e-learning course, and the University of Rzeszów Library has the "Library Training" tab on its website.
In most libraries, e-learning is primarily used to conduct library training, which includes: training materials familiarizing with the library structure and functioning, showing search techniques in library catalogs, and indicating sources of knowledge. These courses prepare students for independent use of the library's offer. In all libraries, the courses end with a checking test, which is also a final test. The solution used by the Library of the University of Warmia and Mazury in Olsztyn should be noted there. Library training at the first and second level of education has a clearly defined:

- content of the course, which concerns the rules of using the library's collections and services
- learning purpose, i.e. learning how, when and where you can use the library's collections and services
- description of the learning outcomes of the subject - the subject is part of a general academic program of the first cycle,
- learning outcomes: the student after completing the course knows the rules of using the library
- tasks: the student understands the need for lifelong learning

The e-learning course of this library is complemented by tutorials and a library guide in the form of an interactive, virtual walk.

Libraries that do not offer e-learning courses usually place public library training on their websites, which contain information about the structure, rules of using the library and its resources, how to use e-resources or how to find literature to write essays. This is the case with the Library of the Cardinal Wyszyński University in Warsaw, which, despite the fact that the university has an e-learning platform, does not place e-learning courses on it.

CONCLUSION

The use of e-learning platforms by university libraries is an increasingly appreciated and used form of education. This is dictated not only by economic considerations, but also by the growing pressure of potential users to conduct e-learning courses.

Most universities have e-learning platforms which are used to provide training. Their main task is to extend the educational offer of the university with classes remotely available. This offer is addressed mainly to students and university employees. Directing the educational offer to recipients from outside the university is a very good solution. This affects their perception as a learning organization, contributing to raising competences and developing the information society.

University libraries, as research shows, also eagerly use e-learning platforms to conduct courses. These courses not only familiarize potential users with the
structure, principles of operation and owned collections, but in many cases also introduce bibliometric issues. This is, to a large extent, a response to the demand on the part of researchers, who are obliged to constantly monitor their scientific achievements. The use of e-learning courses by libraries increases the users’ awareness of the resources and ways to use university libraries. The use of e-learning to conduct library training shortens and, at the same time, approaches to the time of training implementation more flexibly. It also has a more convenient form for users, as well as clearly defined procedures for completing and passing such courses.

Based on the analysis, it can be assumed that the process of implementing e-learning courses based on university platforms will soon cover all university libraries due to the usefulness of this type of solution, especially during the great development of ICT services. It is also important that libraries use more multimedia or interactive tasks to conduct training that would require greater involvement of a person undergoing training.

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