

Electronic information in the University Library in Belgrade and the changes they caused

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Abstract

The University Library "Svetozar Markovic" is the main university library at the University of Belgrade, the biggest and oldest university in Serbia. Access to electronic resources through the Internet is provided for all academic libraries through KoBSON, the consortium for coordinated acquisition, established at the National Library of Serbia. We started with about 3,000 journals and two services in 2002 and now we have access to 13,500 electronic journals and 20 e-services for all disciplines. All services are used in the Internet centre in the library and through the academic network in all institutions that are connected to it.

During the Tempus project "Building cooperative academic library network for the universities in Serbia" UMI_JEP 16059-2001, librarians from Serbia had the opportunity to learn from colleagues from university libraries in London, Berlin and Vienna. Librarians prepared promotional and educational materials for users, which are freely available in the library and on the library website, www.unilib.bg.ac.yu. Librarians from the Department for Scientific Information are engaged in planning and conducting courses for librarians from other academic libraries, researchers and students of the University of Belgrade, which take place either in the library or at different faculties. Usage statistics show the steady increase in the use of electronic resources.

Electronic information in the University Library in Belgrade and the changes they caused

The University Library "Svetozar Markovic" is the main university library at the University of Belgrade, the biggest and oldest university in Serbia. The university was established in 1905, without a main library. The main university library was established in 1921 and started operations in 1926, after the library building was finished. The Carnegie Foundation for Peace donated the necessary funding for the building, and the City of Belgrade donated the ground. Today the main building needs repairing and adaptation of its space for reading rooms, carrels, meeting rooms and other user spaces expected in a modern university library.

As a result of an unfortunate series of occurrences for a library – wars, sanctions, inflation, transition ... the reconstruction of the main building was postponed, and only small changes were possible. On the second floor of the library one room was adapted as a computing centre, one for an Internet centre and two for small reading rooms. The automation of the library cataloguing started in 1988. The Library was a member of the shared cataloguing system in former Yugoslavia, and after the split of the system in 1992, continued to work locally using the same software. In 2003 the shared cataloguing system was reestablished on the level of Serbia, as a result of the combined efforts of the National Library of Serbia, Library of Matica srpska and University of Belgrade library, and with the help of grants received from the Open Society Institute (OSI) and the EU.

The University Library in the late eighties used DIALOG and had ISI Citation Indexes, LISA, ERIC, AGRICOLA and some other information resources on CD-ROM. The users of those electronic resources were predominantly researchers from the universities in Serbia, postgraduate students and very rarely other users. The research was performed by a librarian - subject specialist from the Department for Scientific Information, usually in the presence of the user. A proportion of the requests were for citations of articles by authors from Serbian universities and scientific institutes, since the number of citations was used as one of the criteria for evaluation of their scientific performance. The other part mostly concerned searching scientific literature on specific topics, usually themes for scientific projects or dissertations. The majority of the requests came from the scientists in natural sciences and biomedicine. The results of the searches were printed or downloaded on floppy discs and given to the users. As it is often recorded in the literature, from the moment of the purchase of the first databases on CD-ROMs, our users did not want to look through printed reference publications and search for relevant literature any more, with the exception of a few older professors.

Internet was introduced into the Library in 1995. The Library was connected by fiber-optic cable to the Computing Centre of the University of Belgrade, and as soon as the academic network achieved good performance the Library achieved good performance also. That was the first condition that enabled the Library to concern itself with the possibility of turning to electronic journals instead of printed ones. Before 1991 the library had about 1,000 titles of current serials concerning all fields studied at the university. During the difficult last decade of the twentieth century, the number of current serials fell to one third, and the majority were domestic serials or serials received as gifts. The only way for the library to get current foreign serials was to combine its efforts with research libraries in Serbia and to get access to electronic journals.

In 2001, OSI provided Serbian libraries with access to about 3000 electronic journals through the eIFL project. Good experiences with electronic journals and user satisfaction with the search results, convinced us that the printed journals era in Serbia is over. In 2002, the Consortium for Coordinated Acquisition for Research Libraries, KoBSON, was established, with headquarters at the National Library of Serbia. The Consortium provided for all academic libraries the access to electronic journals and databases. It started with about 3,000 journals and two services and now we have access to 14,000 electronic journals with full text and 20 e-services for all scientific disciplines and arts

and humanities. All those services are used at the Internet centre in the Library and through the entire academic network. The Internet Centre has 15 computers for users. Since 1998 it has been situated on the second floor in adapted space (former book stacks). The Centre is open from 8 a.m. till 8 p.m. from Monday to Friday and from 8 a.m. till 2 p.m. on Saturdays. At first the space and number of computers was sufficient for user needs, but now it is far from enough. On average now about a hundred users visit the Centre daily.

We can conclude that the main changes from traditional to e-library already happened at the University library in Belgrade. The Online catalogue, which includes all publications that arrived in the library from 1988 plus frequently used publications, is used much more than the old card catalogues. In 2004 there were 198,000-recorded searches of the OPAC. From January 2003 (for the books in the e-catalogue) it is also possible for the user to see the date of borrowing if the book is on loan. Interlibrary loan introduced in 2004 online requests and article delivery by e-mail. The Library has had its own web page from 1995, but in 2003 it was changed. A permanently employed webmaster and a group of librarians are engaged in its production and maintenance. Requests for database searches are accepted by e-mail, and the results, if requested, are delivered the same way. The shift from printed to electronic journals and databases imposed new tasks on librarians from the Department for Scientific Information and Library System Development. Library instruction for users, which was performed occasionally on requests from professors, had to include completely new content and to reach a much wider population. The number of potential users is huge – about 75,000 undergraduate and postgraduate students, about 8,000 teachers and a few thousand researchers from scientific institutes. There are only 8 librarians at the moment employed in the Library qualified to teach how to use all the available electronic resources. The problem seemed impossible to solve. We decided to start with the study of foreign experiences and with education courses for librarians from libraries belonging to the academic library network, so they could teach the users in their libraries. There are 64 libraries with 163 qualified librarians employed at the faculty libraries of the University in Belgrade and the University of Arts in Belgrade, and the University Library “Svetozar Markovic” is professionally responsible for them. During 2002-2004, 8 courses were conducted at the library with 108 attendees.

According to Michel Koenig (1), before the start of systematic education, the librarians should:

1. Design the training and user education program first
2. Train users for direct information and knowledge search
3. Facilitate browsing
4. refer to it and think of it as coaching, not user training
5. Not just show how, tell why.

We thought that those were good principles to use for the education of librarians from academic libraries, so at first we designed teaching materials for them for electronic journals, gave the printed material to every attendee of the course and put the full text of the material on the library website, so the librarians who could not attend the course

could have it too. We also gave the e-mail addresses and contact phones to all of them, so they could contact us and ask for help if they have any problems in searching e-journals and databases. The courses for librarians were held usually on Sundays, lasting 8 hours. One teacher and one demonstrator were always present. After the introductory lesson on electronic resources, the practical work with databases and e-journals of interest for their subject specialisation were demonstrated, and they had the opportunity to search for themselves, pose questions and ask for help.

There are a lot of user studies concerning their expectations from the library. Since we had not time to perform our own, we tried to use the data collected from published studies. One of them was by Helen Hayden and Terry O'Brien from Waterford Institute of Technology Libraries (2). The majority of students and staff visited the library during the year, in person or online. When asked why they visited the library, students responded in the following order of importance from a list of ten options: to use library computers; for individual study; to borrow books. Staff priorities were to borrow books and to consult journals. In total, 52 % of student respondents and 77 % of staff have visited the library web site – mainly to access the electronic catalogue and to find out information about the library.

In the study performed by the authors from a Spanish and a Mexican university, a lot of data about the expectations and habits of students in using the libraries and data about their information literacy were collected (3). The results show that between 70% and 40% of students when having educational support problems turn to their classmates, about 60% seek faculty assistance, between 52% and 58% use the university library, 50% surf Internet, and only between 5% and 8% ask library staff for help. Since the percentage of students that would visit the library is much bigger than the percentage of those who would directly ask librarians for help, it seems that the library website and teaching materials available to the users are the right answer to the needs of a lot of students. The results have revealed a number of factors that affect university students' information literacy or illiteracy. "Information illiteracy is attributable to anachronistic ways of teaching that validate reliance on note-taking by students, on textbook-based learning and on absorbing outdated information. Thus, in order for university students to become information literate a hybrid "teacher-librarian" approach must be established. This implies a commitment on the part of the teacher to the motivation of students so their learning can occur more naturally, by placing the activities of information use and information access in the context of realistic problem-solving exercises. The librarian, on the other hand, should abandon a passive position and push themselves forward actively into the educational environment, no longer underestimating their role and value, but committing themselves fully to the learning process hand in hand with the student." Those lines are the result of studies in Spain and Mexico, but their results about the old fashioned way of study and its influence on information literacy and life long learning are quite applicable for Serbia.

During the Tempus project "Building cooperative academic library network for the universities in Serbia" UMI_JEP 16059-2001, librarians from Serbia had the opportunity to learn from colleagues from university libraries in London, Berlin and Vienna. A review of German experiences is summarized in the article by Benno Homann (4). As

part of our project, colleagues from Middlesex University in London organized for a group of Serbian librarians training in London, and lectures and courses for academic librarians in Serbia. The lectures and courses emphasized the importance of key skills, including information literacy for students, and the role of librarians in teaching those skills (5, 6).

After the consultations with our partners in the Tempus project, we concluded that the first activity towards the introduction of systematic user education should be the production of teaching and promotional materials. Those materials should be distributed in the university libraries and online, through the web site of the University Library in Belgrade. The second phase would be the introduction of optional courses for users, at beginners and advanced level. Taking into account the potential population of university students and users, we concluded that it is not possible to wait until the librarians from the academic libraries reach with courses a significant part of the university population. Straight forward calculation says that 1 librarian-specialist for electronic resources should teach between 8 and 10 thousand users, and that is not possible to organize.

The inevitable trend of going online both in university studies and in library instruction are very well described in an article by Hua Yi this year (7). In the USA, nearly half of the 4,000 major colleges and universities offer courses over the Internet or use the web to enhance campus classes. About two million students take online courses from higher education institutions and the number is expected to increase to five million by 2006. Growth in online education is a world phenomenon. Students that are used to being trained online and to use training materials delivered online, are best suited to the library instructions and courses concerning information literacy online. “When technological innovations and explosive amounts of information present opportunities and challenges to higher education, implementing a successful IL program becomes critical for our student education. When the online agenda moves to the center of university programs and when all aspects of library services enter cyberspace, it becomes inevitable for IL instruction to go online.” Online IL materials make it possible for librarians to reach a much greater population of users, reduce repetitiveness and give the users the opportunity to learn their own way.

The interesting development of teaching information literacy in Finland is described in an article in *Library review* 2003 (8). The main differences between teaching library skills and teaching information literacy are summarized in the following table:

Teaching library skills	Teaching information skills
Library viewpoint essential	Learner viewpoint essential
Guidance given by the library	Cooperation between faculty teaching staff and librarians essential
Teaching as a secondary function	Pedagogical skills in the libraries emphasized
Teaching uncoordinated	Standards form a basis for the cooperation between libraries both nationally and internationally

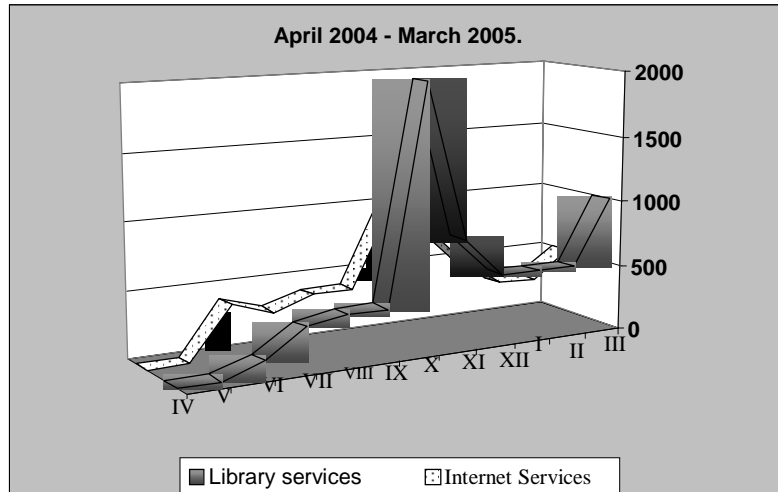
Academic librarians in Finland are involved in the planning of information literacy programs, but there is a long way to go until librarians become a part of the regular teaching process at universities.

As a result of all consultations with colleagues and relevant literature, librarians from the Department for Scientific Information and Development of Library System of the University Library in Belgrade decided to design by themselves the necessary training materials and to make it freely available in the library and on the library website, www.unilib.bg.ac.yu . The importance of the web access to training materials seemed very important to us, because we wanted to reach as many potential users of electronic and other resources in the library or on the web. Librarians involved in user education are all the part of the team who decides what and how will be presented on the web (9).

In April 2004 we printed the first 7,000 instruction leaflets in colour. The leaflets titles were :

LIBRARY SERVICES;
HOW TO JOIN THE LIBRARY;
THE HOLDINGS OF BOOKS FOR USE IN THE LIBRARY,
YOU MAY WISH TO ASK US...,
THE OPAC – Abbreviated version, the Basic, Advanced and Command Searching,
INTERLIBRARY LOAN,ELECTRONIC JOURNALS,
THE INTERNET – simple and advanced search,
ELECTRONIC MAIL and
WEB OF SCIENCE.

During the months of April and May our users did not seem to be interested in new leaflets. The librarians would hand the instructions to the users personally, but the users would leave them lying on the table in the Reference department or Internet Centre. Two months later we installed shelves on the walls on three main spots for users in the library. Users then cautiously started reading the items that were on the shelves, but often did not take them away. During the summer a lot of new users were registered, and the consumption of printed instruction increased, in proportion with the number of newly registered users. In October we put up our posters at faculties, advertising all our services. A large number of new users registered in October, which led to an explosion in the usage of printed instructions. The leaflets for using the catalogue and the library holdings were used more than the leaflets for using the Internet Center and its services. At the beginning of 2005, the situation was different because the number of old and new students is proportional, so the consumption of different leaflets is balanced.



The users are now much better informed about the services that the Library offers. According to our experience, the users could be divided into two groups: the beginners and the sophisticated users and their requests and expectations are very different.

The users obtain information more quickly and use more all of the services that the Library offers. Fast Internet connections also influenced the rate of visiting Internet Centre. Information literacy of our users is growing, and users seek information through the Internet. Knowledge of foreign languages, especially English is widespread enabling users to search through electronic journals. A new trend is that many university professors set assignment tasks for their students to obtain information from the Internet or from electronic databases, using summaries or full texts and recommend them to go to the library.

Many users do not ask the librarians anything. They find their way independently, using the printed instructions. Those who wish to obtain more sophisticated information turn to the librarian, who now has more time to devote to them. The librarian also no longer wastes time explaining how a library slip should be filled in, what a call number is or how many books one is allowed to borrow at a time. The people working at registering and lending counters also don't need to answer the frequent usual questions, because the answers are on the leaflets.

Teamwork improved the quality of work and communication at the Department of Scientific Information and Development of the Library System. The librarians left behind the old everyday routine, and showed their creativity in designing the teaching materials. Many employees have improved their computer skills in programs such as Microsoft Word, Photoshop and Corel Draw. The inter-department communication has improved, since our colleagues gave us suggestions as to what to add to the leaflets that would make their work easier, and they also passed on to us the users' wishes and suggestions.

After 8 months of experience with the educational leaflets, numerous changes, improvements and discussions, we decided to put them on the first page of the University Library website. The initial number of leaflets grew, since we prepared separate leaflets

for all electronic services available to academic libraries in Serbia. The statistics of visits and downloads from the website show that educational leaflets are widely used, not just printed forms in the library, but also electronic forms. Without the idea that this is perfect, we think that it was a move in a good direction. The Library got more educated users, physical and virtual, the same number of librarians managed to reach a much greater number of users and to transmit their knowledge, and the trust in the library as a place and a librarian as a person to turn to when having an information problem is much more widespread between students than a year before. The next stage will be the production of online tutorial for users, but before that we are thinking of conducting a user study, to get a better picture of the kind of online materials that would serve their needs best.

The next activity that librarians from the Department for Scientific Information and Development of Library System are involved from the beginning of 2005 is the education of teachers and researchers working at the faculties and institutes belonging to the University of Belgrade and the University of Arts in Belgrade. There are 34 faculties and 7 institutes belonging to those universities. We are planning presentations of electronic services available to the academic network in Serbia for all those institutions. Before June, we plan to visit all of them and give basic lectures, and then to prepare more sophisticated subject specific courses for all interested institutions. The programme for the basic course is made together with other members of the Consortium for coordinated acquisition, KoBSON, and university libraries are engaged to conduct courses in the cities where they are situated. Currently we have had 15 presentations in Belgrade. Some of them were well attended, some not so, but the good thing is that the faculties where the attendance was low call us and ask for presentation again, because the management of the faculty after the first presentation understood that it is important for all professors to know about and use those resources. The programme for the advanced level will be prepared in coordination with library boards from those institutions.

We hope that in this way we will be able to reach a much wider range of users than before. The use of all those services will increase even more, influencing the level of information literacy of our users, and indirectly their success in studies or research.

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