

УДК 37.014

Social Aspects of an Academic Digital Library: New Initiative of Siberian Federal University

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Received 6.10.2010, received in revised form 13.10.2010, accepted 20.10.2010

The article introduces the project of Siberian Federal University which explores the potential of the university digital library as a strategy for human resource development. The latter is planned to be achieved by constructing a scheme of information and communication services that will meet social, educational, and developmental needs of the youth in the Krasnoyarsk Krai. The article explores a possible connection between digital libraries and social-educational issues of the region, presents research results of the needs and expectations of the main target groups (schoolchildren, teachers, school administrations), and summarizes Russian and international experience of digital libraries.

Keywords: digital library; e-library; human resource development; social-educational content; social networks; multimedia

Introduction

The rapid development of digital libraries (DL) in the world in the last decade encouraged academic and professional research in a variety of directions. Siberian Federal University (SFU) opened the biggest digital library in the Krasnoyarsk Krai in the beginning of 2010 and the library has already drawn the attention of students, researchers, authorities, educationalists and social workers, as well as common citizens of the region. It is believed that the library will play an important role in the social development of the region and several projects have been launched including the project “Social-educational content of the SFU digital library for the purposes of human resource development in the Krasnoyarsk Krai:

concept and implementation mechanisms”. The project is supported by the Krasnoyarsk Regional Fund for Research and Technical Research Support. The goal of the project is to explore the potential of an academic digital library in order to raise the effectiveness of human resource management in the region, to work out the main principles of the social-educational content of the library and the mechanisms of their implementation. The article explores a possible connection between digital libraries and social-educational issues, summarizes Russian and international experience of creating digital libraries, presents research results of the first stage of the project and objectives for the further project development.

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Digital library and social-educational issues

The demographic decline, complex migration processes, young people's leave for more comfortable regions of Russia demand a new policy of human resource development and management with the focus on the schoolchildren and other types of the youth of the Krasnoyarsk Krai. To enhance the dynamics of the development of the region it is necessary to provide socio-cultural and professional education, and appealing career opportunities for the generation of modern schoolchildren.

The existing models of human resource management exploit traditional ways of communication whereas the younger generation prefers virtual means of interaction. Modern teenagers spend most of their free time in the environment of virtual worlds free from any influence, policies or ideas of the region. We believe that educational, professional, and cultural activities should penetrate the electronic environment 'inhabited' by the youth of the region. The central university digital library in the Krasnoyarsk Krai may become a possible resource to achieve this purpose but its potential needs to be explored.

Due to the reason of being a considerably new phenomenon the term 'digital library' or 'electronic library' is used to describe a variety of entities and concepts (Borgman, 1999; Neuhold and Niederee, 2001; Soergel, 2008; Yershova and Khokhlov, 1999). Yershova and Khokhlov define digital library as a distributed information system able to safely preserve and to effectively use various types of electronic documents collections (Yershova and Khokhlov, 1999). We find this definition to be lacking an important aspect – social. Indeed, it ignores the target audience of digital libraries, which we consider to be central for the project launched in Siberian Federal University. For this reason the definition

offered by Neuhold and Niederee was chosen as a working one and though it does not focus on the human resource management issues, it still leaves space for social issues to be addressed by e-libraries:

Digital library is an information system targeted towards a specific community, where content from different sources is collected and managed, content is structured and enriched with metadata, and a set of services is offered that makes the content available to a user community via a communication network, typically the Internet. (Neuhold and Niederee, 2001)

The functions of a digital library mainly coincide with the functions of a traditional library. They differ in how information is delivered to the user. This is where the SFU project team has sensed a potential that digital libraries may have in terms of addressing the needs of various social groups. It is acknowledged that this potential has not been studied yet and therefore the project team chose to study how the gap between the variety and the scope of globally accessible information and every individual user can be filled (Griffin, 1999; Pinfield, 2001). We began our investigation by analyzing the experience of academic digital libraries in Russia and abroad. The research summary is presented below.

Existing experience

The development of digital libraries in the world began in the eighties of the last century first in the USA and Great Britain, and then in other European countries. Nowadays DL projects, national programmes and international initiatives are growing in number all over the world. Some examples are: Digital Library Initiatives of the National Science Foundation in the US, Electronic Libraries Programme of Joint Information Systems Committee (JISC) in

the UK, the Telematics for Libraries program of the European Commission, a series of electronic library projects in Japan. Most universities open their own e-libraries and establish DL networks. In Russia universities and other institutions are creating their e-libraries and establishing digital library networks. The Interdepartmental Programme "Russian Electronic Libraries" launched at the end of the last century has supported a range of projects aimed at e-library research and development. Traditional public libraries, libraries affiliated to universities and research institutions take effort in creating digital databases, electronic information networks and providing service delivery.

The study of the objectives, services and activities of a number of university e-libraries in Russia, the US, the UK, Europe and Asia, undertaken by the SFU project team, revealed the following tendencies in terms of social-educational activities:

- Most academic libraries provide services for university students and researchers and do not consider secondary schools as their target group.
- Some universities view their libraries as an open resource for public, though sometimes this claim does not get into practice.
- Some e-libraries offer useful services, for example, workshops on how to create one's own e-library or how to carry out on-line research. Unfortunately, these resources mainly focus on university students and teachers, not on the outside community.
- The biggest university libraries take responsibility in making their services as open as possible. The Cambridge University digital library offers services for people with special needs, provides support for those who plan to enter the

university, carries out research in the healthcare area, and organises public exhibitions and lectures.

- Some academic digital libraries in developing countries facing the illiteracy problems make effort to address the needs of general public. For example, the Open University of Hong-Kong is trying to make the library resources easy to access for citizens of various backgrounds. They also translate digital resources into Chinese, which makes the information accessible for a wider community. And finally, the library carries out public seminars and workshops presenting opportunities and services of digital libraries.

Following Gould and Gomez it is important to understand and to form digital library audiences' opinion about what functions a DL should have and what services it should offer (Gould and Gomez, 2010). The next part of the article investigates the opinions and expectations of the main target groups of the project – secondary school teachers and students.

Research results

The method of focus-groups and a survey were used to investigate schoolchildren's and teachers' expectations about the content and the service organisation of the electronic library of Siberian Federal University. The research purpose for the focus-groups was to study the expectations that various target groups have about the e-library resources. This is why the respondents were chosen from different territories of the Krasnoyarsk Krai, came from various communities – the capital city of the region, smaller towns, rural areas, and represented a variety of educational institutions. There were students, administrative staff and teachers from gymnasias and schools specializing in certain

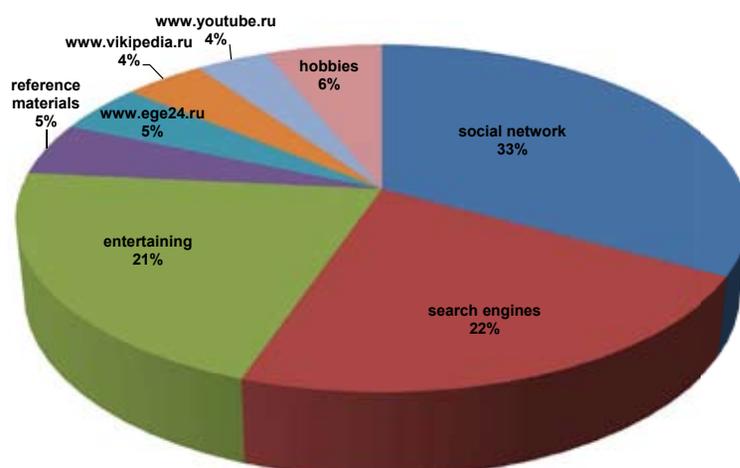


Fig. 1. Relation of most popular Internet resources with schoolchildren

subject areas, elite schools with profound study of science and mass schools, a military school and a children's home. In total 26 secondary education institutions from 14 locations took part in the project research, which comprised 158 teachers and 140 students.

The research was carried out in the following order:

1. explanation of the research purposes
2. preliminary discussion
3. focus-group meeting
4. interpretation of results
5. survey and focus-groups results analysis and their discussion with a group of experts

It is necessary to mention here that we invited the most active and dedicated teachers and representatives of school administrations to be our respondents. As a result it turned out that the majority of the respondents were women (45.1 %) of forty and above, which reflects the current situation in Russian schools where middle-aged female teachers prevail over their male colleagues and younger female teachers. The younger generation of teachers comprises 14.1 % in secondary education. Among subject areas dominated science teachers. All this leads to the supposition that a potential consumer

of DL services among teachers and school administration is a female of around forty.

The selected schoolchildren were students of the same institutions as teachers. Among the respondents there were 61 % of male and 39 % of female students.

According to the study, 53 % of students stated that they actively use the Internet. Among the 140 respondents only 23 % use the Internet less than an hour a day and have no access to the Internet at home, 53 % spend more than two hours daily using the Internet.

The most popular site with the students is 'vkontakte.ru', which was chosen by more than 40 % of the respondents. About 20 % of the students' use search engines such as 'mail.ru', 'yandex.ru', 'google.ru'. The respondents also quite often mentioned the sites of network communities 'Мой мир' (My world), 'Одноклассники' (Classmates), national examination site ege24.ru, electronic encyclopaedia site 'Wikipedia', multimedia site 'youtube.ru'. Not unexpectedly, a considerable number of the respondents testified that they often make use of entertainment sites, including game and music sites, electronic books collections, fan-clubs of pop stars, sport sites, and hobby sites. Fig. 1 indicates the most popular Internet resources with the schoolchildren.

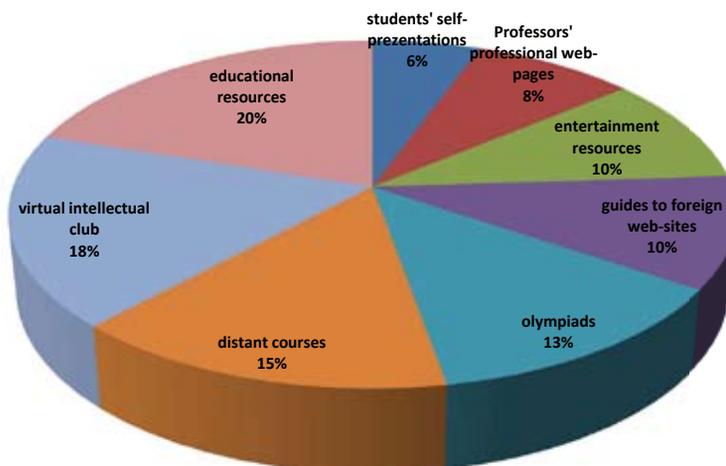


Fig. 2. Students' expectations from the content of the SFU digital library

Among the reasons for the use of the Internet most students stated e-mail services and on-line games. They failed to give names of any educational on-line resources or digital libraries. This fact leads to a conclusion that this kind of Internet resources is unpopular with the young generation.

The respondents among teachers and school administrations actively use teaching and learning resources on the Internet. They often visit professional network sites, such as 'Open class' (<http://www.openclass.ru>), 'Internet is a teachers' state' (<http://www.intergu.ru>), 'Creative teachers network' (<http://www.it-n.ru>). More than 30 % of the teachers make use of the on-line encyclopaedia site 'Wikipedia' and the site of the Federal Institute of Educational Measurements (<http://www.fipi.ru>). The Joint Collection of Digital Educational Resources (<http://www.school-collection.edu.ru>), the site of the publishing house 'September 1' (<http://1september.ru>), the Krasnoyarsk Krai Ministry of Education site (<http://www.krao.ru>) are most popular with teachers from rural areas. The most frequently mentioned on-line resources were electronic encyclopaedias ('Kirill and Mephodiy', 'Wikipedia') and electronic dictionaries. The sites of digital libraries did

not fall into the number of the most visited and required sites with the teachers.

Among the most popular resources used by the students to do homework are essay collections and the 'Wikipedia' site. To the question 'What prevents you from using the Internet for educational purposes?' the students replied that they feel no need to do so, the teachers do not explain how to work on-line, or that the assignments do not require the use of the Internet. Only teachers of biology and geography engage students in activities based upon the use of the Internet. Among the most appealing types of educational resources the students named video and Power Point presentations.

The part of the survey and the focus-groups about the students' expectations from digital libraries confused the students, which can be explained by the fact that the whole notion of a university digital library is new to them. Still they came up with some ideas (Fig. 2) and most of them admitted that first of all they see a digital library as a resource for entertainment and additional distance education. The most preferred types of DL resources are video, audio and multimedia. The students also expressed a wish to present themselves at the site of the university DL. This is possible via the technology of e-portfolio.

Further project development

To conclude we would like to re-state that the project “Social-educational content of the SFU digital library for the purposes of human resource development in the Krasnoyarsk Krai: concept and implementation mechanisms” has

just begun and at the next stage the project team will work out the main principles of the social-educational content of the SFU digital library, develop the mechanisms of their implementation, and get professional and public expertise.

References

Gould, Elizabeth and Ricardo Gomez (2010) “New Challenges for Libraries in the Information Age: a Comparative Study of ICT in Public Libraries in 25 Countries”, *Information Development*, 2010 26: 166

Griffin S. (1999) Digital Libraries Initiative. Phase II, *Russian Digital Libraries Journal*. Vol. 2, Issue 3. Retrieved from <http://www.elbib//1998/199801/nsf/nsf.ru.html>

Neuhold E. and C. Niederee (2001) Multimedia Libraries – Role of Digital Libraries in Content-to-Community Mediation, Metadata and Search Services. Retrieved from <http://encyclopedia.jrank.org/articles/pages/6822/Multimedia-Libraries.html#ixzz0eewi4oXP>

Pinfield, Stephen (2001) Managing electronic library services: current issues in UK higher education institutions. Retrieved from <http://www.ariadne.ac.uk/issue29/pinfield/>

Soergel, Dagobert (2008) Digital Libraries and Knowledge Organization, in Kruk R. and B. McDaniel, eds. *Semantic Digital Libraries*, Springer. Retrieved from <http://www.dsoergel.com/NewPublications/SoergelDigitalLibrariesandKnowledgeOrganization.pdf>

Yershova T.V. and Yu.E. Khokhlov (1999) Interdepartmental programme “Russian Electronic Libraries”: approaches and perspectives. *Information Society*. Vol.3, 21-27. (In Russian)

Социальные аспекты университетской электронной библиотеки: новая инициатива Сибирского федерального университета

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В статье представлен проект Сибирского федерального университета, исследующий потенциал электронной библиотеки университета для развития человеческого капитала. Достичь этого планируется через создание системы информационных и коммуникационных сервисов, направленных на удовлетворение социальных, образовательных и развивающих потребностей молодежи Красноярского края. В статье исследуется возможная взаимосвязь между электронной библиотекой и социально-образовательными задачами края, приводятся результаты исследования ожиданий основных целевых групп (учащиеся школ, учителя, школьная администрация) и краткое описание опыта электронных библиотек в России и за рубежом.

Ключевые слова: цифровая библиотека; электронная библиотека; социально-образовательный контент; социальные сети; мультимедиа.
