

Library Science Distance Education. Information Literacy

Romanian Libray Science Distance Education. Current Context and Possible Solutions

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Abstract

The option for another solution for the Romanian Librarianship and Information Science Studies has a systemic and individual advantage at the same time. In a society where the legislation lacks seriously about the professional training, where the political decision goes above the objective criteria of hiring, a distance training imposes as an alternative solution (for those who are in the system to improve their skills, and those who wish a career as library specialists to have the opportunity to choose the proper type of learning).

The necessity to experience a teaching formula for distance learning librarianship specialization is not only a need related to the labor market but rather a result of pragmatic transformation of info-documentation structures in an electronic communication era. The "d“gital" ”comes the attribute of everyday task-communication, image creation, collection preservation, and learning.

We thought it would be very useful to propose a model of teaching, learning and assessment for distance higher librarianship tested on www.oll.ro, Open learning library platform to analyze the impact on students, and especially to test the effectiveness of teaching and assessing knowledge from distance. We set a

rigorous approach that reflects the problems facing the Romanian LIS education system and emphasizes the optimal strategies that need to be implemented. The benefits of such an approach can and classified as: innovation in education, communicative facilities, and effective strategies for teaching library science.

Keywords: *information science, distance learning, open learning library, library legislation*

The medium diagnosis

The Education Law Cap. X, Higher Education, art. 2 states: “*the mission of institutions of higher education is teaching and research or education only*” while art. 60. 1 sets out the ways of providing education: “*teaching can be organized in the following forms: full time, part time and distance. The forms of evening classes, part time and distance can be organized by higher education institutions that have full time programs.*” (1). Distance education is a suitable alternative for info-documentary fields because the dynamics of information imposes the reorganization of knowledge management. Distance learning is an optimal alternative when training needs and professional information are accomplished, when is designed efficiently and improve the quality of teaching and learning. Through the mission and diversity of the training programs universities are active growth factors, stimulating the labor market. The need to receive a form of distance learning comes from the obligation of the institution to provide answers to questions raised by education requirements and maximize opportunities for access to it. Educational and scientific content market is included in business and the access to quality information technology will be facilitated as the most effective presentation and efficient from an economic perspective is the electronic form.

I. European laws and standards

We believe that the legislative sphere that must be taken into account in the implementation of distance learning forms is provided by the European component that gives directions for development of the field and Romanian particular manner that allows structuring programs of study. We identified the following landmarks in this work:

1. **The Lisbon Strategy** that aims at raising the quality of educational processes in a knowledge society, implementation, capitalization of information and communication technology facilities innovation and promotion. (2)
2. **The Bologna Process** (3) that aims at unifying and standardizing the European higher education through:
 - a. The common training standards by master's and doctoral degree programs.
 - b. Standardization of assessments by applying the credit transfer system.
 - c. Promotion and facilitation of student mobility at European level.
 - d. Conducting a European academic institutions and accreditation assessment.
3. **Copenhagen Process** on vocational training and promotion of e-learning.
4. **UNESCO programs** that promote education for all citizens by the UNESCO Institute for Lifelong Learning (UIL).
5. **European Qualifications Framework** for lifelong learning.
6. **European Commission** – Jean Monnet Lifelong learning.

II. Romanian Legislation

- a. The Education Law no. 84 of 1995.
- b. Law no. 288/2004 about the university studies.
- c. Government Decision 1011/ 2001 on the organization of distance learning programs.
- d. Government Decision 1175/2006 on the organization's degree program in fields of study in full accordance with the specifications made in the Bologna process, librarianship and information science are included in the fundamental areas: Social and Political Sciences and Bachelor's degree domain Sciences of communication;
- e. Libraries Law no. 334/2002.
- f. The teacher's Status.
- g. Community Program for life-long learning for 2007–2013 period, developed by Socrates and Leonardo da Vinci.

The steps of initial training:

Joint Quality Initiative adopted in 2004 a set of descriptors for all phases of initial training, which is the foundation of the scope of qualifications at European level, called Dublin descriptors. These indicators help define specific study skills to secure the award of diplomas for bachelor, master and doctoral degree.

The development of these descriptors and their uniform application at European level allows a clear observation of the degree of specialization of graduates after each cycle. Skills obtained at the end of each type of training are a measure of professional standards.

The document prepared by the General Directorate of the European Commission for Education: Compendium of Good Practice Cases of e-learning includes 43 best examples of good practice for implementing e-learning policies in Europe (we observed the absence of the Romanian experience) is based on following quality criteria: (a) implementing eLearning platforms; (b) the use of ICT; (c) innovation; (d) practical results and impact analysis; (e) functionality; (f) visibility; (g) learning experiences value and transferability; (h) the current distance training and specialization.

The forms of distance learning librarianship subjects were and still are a modern democratic solution to allow the access to education and specialization of all categories of students. Unfortunately, universities that run these programs do not reflect a systemic vision of the representative field nor those representing and providing appropriate specialization programs. At the present moment, distance library education is being provided by the University of Braşov – bachelor, and master degree in LIS, Romanian language at University of Cluj.

The analysis of curricula for library and information science disciplines allowed the following observations:

At the University of Braşov, the topics of study include insufficient hours in disciplines essential to understand info-documentary structure management, automation, marketing data structures documentation, considering that at this time, databases and electronic services are indispensable sources of training and research, but are focused mainly on material from field history (Ethnography, General Museology, Numismatics, Monuments, Paleography (Cyrillic, Latin, Greek) which entitles us to conclude that, the department does not have the best professional teachers body appropriate to this specialization. The skills listed in the curriculum have a close connection with the History are oriented towards cultural studies and Romanian language. The professional skills included aims: "*k*" *nowledge of theories and practices of management*

and marketing publications of any kind",”but the plan does not contain sufficient management and marketing hours.

We found the lack of an e-learning platform facilitating students' access to courses; students receive tests in a print format, which must be sent back by traditional mail or e-mail teachers for evaluation. Transverse and professional skills are oriented to communication and literature; for a future bachelor, the current state of the librarianship field is not reflected by these courses. The skills for information organization and retrieval are not highlighted, data storage formats which the filed operates with are not present, and the types of libraries form hybrid to electronic are not reflected also. (4)

The role of Distance Learning in Library and Information Science Field must

1. Promote the concept of *lifelong learning* among professional staff in libraries.
2. Integrate electronic learning environments in LIS education.
3. Promote the visibility and accessibility to library education by rethinking initial and ongoing training programs.
4. Shape a curriculum that allows the necessary set of skills to work in all information and documentation structures.
5. Develop student-centered training and interactive learning programs by facilitating interaction between students.
6. Improve the interpersonal communication and institutional development.
7. Allow the development of collaborative learning and agree with EU policies on education and training that aim:
 - a) Ensure the librarian's mobility and lifelong learning.
 - b) Optimize the quality and efficiency of education and training.
 - c) Promote equity, social cohesion and active citizenship.
 - d) Enriching creativity and innovation in education and training.

Project for ID implementations in Romanian Library and Information Science

An alternative form of learning for library science has a pragmatic justification: to allow access to initial training and specialization for the geographical, economic disadvantaged persons or for those constrained by time work schedule. The independence of time and space, a suitable

learning environment format, that online model offers are very important factors for everyone actively engaged in the social life. Evaluation of the electronic platform that we propose by conducting a pilot project could provide pros and cons of implementing such a system.

The platform is based on Open Source CMS Plone Content Management System built on Zope application written in Python and developed by the Plone Foundation. It is software with an attractive interface that allows searching and indexing, and content management for best educational processes and above all, offers the capacity to communicate in real time. It uses a database server MySQL 5.0, while the web servers were Apache 2.2.8.

The content in Plone is metadata assigned according to Dublin Core Metadata Standard. Plone is General Public License licensed applicable to Linux. Technological facilities offered by an e-learning platform optimize teaching learning and assessment and support professional goals of the institution.

The attributes of this system (which we develop in our presentation) are: the ability to post course materials online – Read, power point slides, auxiliary materials necessary to support the course, the student assessment tests online and forum discussions, news type communication facilities, storage facilities individual course materials, statistics. We developed two models of presentation, one applicable for teachers and one for students to exemplify. (5)

Objectives of the project:

- a. *Identify the need for new library professionals at the system level* by conducting SWOT and PEST analysis, to link it with the indications provided by law (Libraries Law, number of posts of the number of inhabitants, the number of libraries by types of libraries). All statistical data collected between 1998–2010 indicates lack of specialists and dedicated positions in the structures of education, culture and research. Reducing the number of students has brought the reduction of school librarian positions, although the existence of the librarian in the social sphere gives the measure of civilization. The lack of organization charts for librarian positions in culture and education institutions reflect a lack of interest for info-documentary component. In most communities in Romania, librarian positions are occupied by persons performing administrative activities, not library tasks and this persists as long as are missing legal

regulations to correct these practices. A SWOT – PEST is necessary to analyse the quality of search skills, information retrieval and manipulation of them by students in secondary education (reflected at national tests).

- b.** *Ensure the access to education for disadvantaged people from geographical, economic, social.* We consider necessary to carry out a strategy to promote education for library science, including: (a) a biannual publication dedicated specialist library distance education; (b) a web page with all the information necessary for a future DE student; (c) a guide to e-learning info-documentary professions; (d) country visits to high schools to promote education as a probe library DE and opinions on the profession perception; (e) public information on distance learning librarianship employment offer through specialized administrative institutions (The County Employment Agencies).
- c.** *Provide human resources – qualified teachers and administrative staff, ensuring communication infrastructure.* The creation and delivery of material support must be accomplished by DE centers in universities. The required ICT includes: Internet connection, data server, the e-learning resource center for teachers and laboratory work for students, recruitment of specialized staff whose portfolio enabling learning accreditation form of DE and defining roles in the new context: teacher, tutor, expert in designing content.
- d.** *Rethink the specific didactics to distance learning librarianship and restructuring curricula.* We propose to develop curricula that addresses the disciplines of knowledge organization, production and management of electronic information that occupy an important place according to current economic developments and technologies. E-learning programs should be structured as to cover individual interests and reflect the state of development of the scientific field. The theory of distance learning is based on the educational resources use, designed for each discipline for independent learning. We believe that the current level of scientific development architecture changed info-documentary structure services and specialist skills and must be correlated with it. We agree in this direction with the inclusion of the following disciplines in the present curricula:
 - *The automation of the info-documentary structure* (with emphasis on skills for Web pages creation, knowledge of e-learning standards, knowledge and ways of assigning

metadata, knowledge of storage formats, knowledge and understanding of the principles of operation of the digital information literacy, knowledge and use of specialized software);

- *Information management* (organizing principles, thesauri, ontologies, semantic web);
- *The marketing of electronic services.*

The info-documentary subjects' offer must be covered by information about the way the e-learning programs are supported by university library services and also by the optimization methods and skills of librarians working in the field of online education.

The curricular objectives should be designed as to pursue the development of theoretical knowledge and skills for working in digital environment to determine the success or failure of a method applied, to provide a clear direction of development in the acquisition of new knowledge.

There is a huge discrepancy between the set of skills required for an information science specialist in Britain or the United States and the same skills required by the Romanian system. Currently in higher education institutions in the countries mentioned there is a new dimension to the profession, *e-librarian* with a modern job description based on e-skills.

The selection of Information and Communication Media

We selected in the proposed example for the following alternative example for communication: *email, chat, forums* – because its contribution to specific instructional design achieving, and because are accessible in distance areas at extremely low cost. *Web-based learning* environment allows synchronous and asynchronous communication, thus building knowledge through reflection, group interaction and experimentation. *Chat and forums*, facilitate effective online presence and interaction between students; allow guidance from the teacher in open learning platform, social communication through distance.

We believe that *e-mail* and *discussion forums* are a suitable alternative for a technical communication platform for Distance Learning LIS and help overcoming isolation, resistance to change and remove the prejudices of age.

There are many critical opinions about the degree of isolation induced by complexity of higher education technology; however, we believe that balancing tutoring hours will remedy these drawbacks. Professors virtual presence is beneficial because it gives credibility to a forum and encourages reticent students, demotivated, confused in the electronic espace.

The content analyzes

Content analysis is an operation necessary to put knowledge into electronic form on CD or DVD. The complexity of each content features requires that some be treated as debates and some as practical applications, where students reflect on the relevant arguments. The SCORM standard indicates the modality to design the course in a modular manner. It is a very important phase because this influences the search and retrieval process and the modality of concept and metadata linking.

A good design of course content has a positive impact on students learning. We believe that distance learning materials, being different in content and objectives, with adapted methods of application must include: text modules, examples of practical application of the topics covered in the course, solving problems and assessment tools. Each course has its own description by exposing the set of objectives pursued and formative assessment test.

Student centered teaching methods

Student-centered teaching methods allow project-based learning and electronic portfolios creations in order to observe the student's individual contribution, the rhythm and adaptability of technologies. Organizing collaborative activities must have a basic tutor support, course monitoring and continuous evaluation. The students are the heart of this new system of education, and the evaluation will be focused on the context in which the experience takes place.

Designing learning objectives must be achieved based on their needs and expectations. The tests used for practical application are structured so that: (a) allow observation of personal progress at a time; (b) allow understanding of the concepts and logic analysis, formative assessment of learning; (c) allow visual operational objectives of the course-evaluation. The tests designed as practical applications allow us to design questions with:

(a) *open response* that stimulate critical thinking; (b) *closed responses*: multiple choice tests, tests true or false options, short-answer tests.

The tutors and course instructors' training

The training of distance learning tutors is influenced by the technological change and the diverse student's typology enrolled in DE programs. Taking into account that the relevant legal frame states that a DL program for LIS disciplines must have a scientific curricula, strong learning objectives, bibliography and common assessment methods, we analyzed the Romanian distance learning librarianship curricula and concluded that: there are differences of vision and design form one institution to another; there is a diffuse placement of subjects belonging to the same scientific field; computer science is regarded as complementary discipline along with sport; some subdomains of computer science were fragmented although the state of art in LIS and the role of library and information structures in social life recommended to include it in the main field of study.

For the institution that runs programs for specialized e-learning platform, we found no quality of modern education. In The Romanian Agency for Quality Assurance in Higher Education External Evaluation Report of Transylvania University of Braşov in 2007 mentions the need to implement electronic platform and notes as weaknesses: (a) The lack of motivation of students to use the university library resources, the need to restructure and update materials; (b) The lack of tutorial instructions – students do not know tutors; (c) The lack of student's representation.

The need to unify the content and support knowledge acquisition and skills determine us to support and propose a common **Master Plan for Higher – Education Romanian Distance Learning**, annually revised, based on internationally representative scientific literature according to Romanian Agency for Quality Assurance in Higher Education Standards.

Curriculum Project for Distance learning Library and Information Science

a) Fundamental disciplines:
Introduction in Communication Science
General Librarianship

Concepts and Methodologies in Social Sciences Study

Book History

Romanian Librarianship

Romanian Contemporary Language

The History of Culture and Civilization

b) Library Science Disciplines:

Information Management

Romanian Bibliology

The collections development and organizations

The collection evidence

Catalogation

Information Literacy

The management of collection

General Bibliography

Research Methods

The marketing of Info-Doc Structures

Indexing and classification

Information and Documentation systems

Special Bibliographies

Library and Information and Documentation Systems Legislation

The management of Info-Doc Structure

Library Automation

Online data base research

Library services for Distance Learning

Academic Writing

Electronic services acquisition

Principles and modalities of documents digitization

Integrated systems

ELearning Standards

c) Complementary disciplines:

Social Psychology

Pedagogy

English

French

Reading psychology

Didactics

Reading Sociology

General Skills Frame:

- a) Knowledge of principles, methods and techniques of the info-doc profession.
- b) Knowledge of role and status of info-doc structures in society.
- c) Knowledge of dynamics and history of professional field.
- d) Knowledge of legislation and organization of the national library system.
- e) Knowledge of selection, disseminations and organization of information.
- f) Knowledge of code and ethical principles of the profession.

Specific Skills Frame:

- a) Knowledge of work methods in integrated library systems.
- b) Knowledge of academic writing techniques.
- c) Knowledge of principles of general and specific bibliographies achievement.
- d) Cataloging, indexing and collections organizing skills.
- e) The ability to work with ICT in info-doc structures.
- f) Knowledge of the Internet network and services.
- g) Knowledge of Web and Multimedia editing programs.
- h) Interpersonal communication skills.
- i) Knowledge transfer capacity.
- j) A scientific attitude and language.
- k) The ability to provide the information source access through thesaurus and ontologies.
- l) The ability to guide the users of information.

The need to experiment with a formula for distance learning librarianship is not only a justification related to the labor market but mostly a result of pragmatic changes that info-documentary structure passed with the interference of electronic component. From this perspective, the library should be seen as a hybrid structure, which provides its users the most varied resources, from print to electronic, and digital specialists involved must possess the necessary skill set to perform such tasks.

Documents collection as pedagogical structure evolved and diversified, the information now is very complex processed and media varies to balance the need for reading and research, enable fast and accurate information delivery. Training of specialists able to manage library collections in their diversity is becoming a part of the mission of

higher education, which must review and update curricula and media learning platforms.

We proposed a model of syllabus for distance learning library bachelor degree, designed to include the general and operational objectives. The nature of the electronic environment requires that teaching strategy should be adapted according to the specifics of this type of training. The lack of verbal communication, of methods of direct exposure and contact with teacher training materials imposes a good structure; the modular workload must also be sufficiently detailed to allow access to better knowledge through repeated exercises, readings and self-assessment tests.

We believe that the problems that arise in planning an online course are related to:

- a) *the manner of access to knowledge:*
 - organizing course material to ensure student engagement in learning situation;
 - providing instructional materials and electronic bibliographical CD, pdf files, links;
 - use of audio-video (recordings of interviews, commentaries, reviews);
 - graphical presentation (power point slides, Corel, Macromedia) of course materials;
 - bibliographical lists, portals, databases;
- b) *tutoring and assessment strategy:*
 - two times on a semester organizing discussions with students;
 - portfolios and individual themes;
 - self-evaluation by testing knowledge repetitively;
 - monitoring progress in solving time analysis tests;
- c) *the teaching methods for distance interaction:*
 - collaborative way – by establishing joint projects to a group of students;
 - group discussion – the discussion of a topic or theme;
 - tutoring online – through direct communication with the teacher.
- d) *evaluation forms:*
 - short answers to questions designed to assess student reactions, degree of logical structure or short-term store;
 - gradual structural questions that allow teachers observing the manner of construction of information and argumentation links between them;

- essay tests that help in observing the creative capacity of synthesis of students, and comprehensive coverage of the subject.

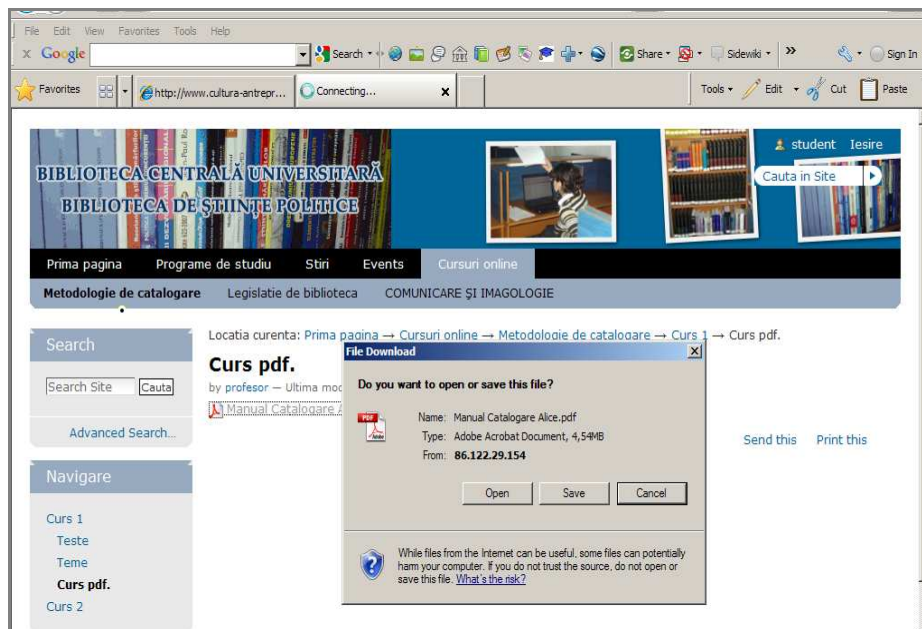
Online Learning Library Platform as possible model for Distance Education for Librarianship in Romania: www.oll.ro

We tested the Online Learning Library Platform in order to analyse the impact on students and librarians, especially to test the effectiveness of teaching and assessment of knowledge through these technologies. We believe that through the Internet and specialized portals, each aspiring student in library science may have access to information and can substantially reduce the costs that physical presence in a higher – education institution claims.

We developed two models of presentation, one applicable for teachers and one for students. Once completed the access data (username and password) the user is led to the home page. The login as a student allows viewing schedules of courses, download materials in a pdf format, reading the online support tests and discussions with the teacher coordinator.



Each course has a specific description for its main objectives and accessing it allows viewing the modular structure:



Conclusions

We intended to analyse a possible method to improve the initial and continuous training of librarians, to identify problems faced by the Romanian education system and the library strategies that could be adopted, and also to highlight some of the problems encountered. We believe that the benefits that such a system provides can be classified by three coordinates:

Innovation in education:

1. Use of modern technologies to provide educational materials;
2. The ability to reuse models or parts of the course materials;
3. The ability to create learning opportunities and present materials in various ways;
4. The ability to communicate and share resources;
5. The capacity to support multimedia features (graphics, video, sound).

Learning Management:

1. Possibility of using course management tools;
2. Ability to organize learning materials in order to address some styles as diverse;
3. Skills for working with electronic and digital media;
4. Opportunity to up-date course content;
5. Password protection material;
6. Online evaluation.

Communication facilities:

1. Opportunity to teach a large number of students;
2. System's ability to convey the material quickly;
3. Synchronous and asynchronous communication facilities;
4. Interactive organization of courses;
5. Input that optimizes media attention, retention and motivation;
6. Accessibility for the disadvantaged and limited time;
7. Ability to work in multiple platforms: Windows, Linux, PDA.

Thus, regarding the initial training curriculum, we consider balancing the basic disciplines as a necessary measure. Further more, a primary objective for the current period for the national library system is to align with the European policies established for knowledge representation, and the inclusion of all the cardinal, theory and practice of digitization of documents. The formats of electronic documents and the analyses of databases are another priority for the content of study programs. The present situation of Romanian Librarianship and Information Studies at distance lacks in legislation and systemic approach, and from this perspective, our analysis argues the need for development on a national scale of a "distance learning librarianship model".

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