

Information Literacy Competency of LIS Students in SALSIT with a Special Focus on Intellectual Property

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Abstract. This paper presents comparisons between some findings from “Information Literacy (IL) Survey on Library and Information Science (LIS) students” with data obtained from a survey conducted in a research project “Analysis of the common practices in the use of products of Intellectual Property in University Information Environment”. Conclusions are drawn for optimizing the quality of LIS education and LLL programs in response to the new demands of the information and digital reality, having regard also for copyright and legal issues.

Keywords: LIS education, information literacy, intellectual property, State University of Library Studies and Information Technologies.

1 Introduction: IL Survey on LIS Students in SALSIT

Prior to this study, there had not been an examination of research experience, information behavior and information literacy skills of LIS students in the SALSIT. The invitation to join in the International Information Literacy Survey on Library and Information Science students came at an important stage in the development of SALSIT, as it is in a period of program and institutional accreditation.

In depth analysis of the findings from Information Literacy Survey of LIS students has allowed the academic staff in SALSIT to make conclusions which will help to update the curricula and programs and to enrich teaching methods and to improve the quality of education.

In SALSIT the survey covered 170 students from Bachelor Programs – Library and Information Management and Librarianship and Bibliography (both full-time and part-time) and some PhD students. The invitation for survey participation was distributed twice – on 30 November 2012 and on 10 December 2012. Each student received an e-mail message explaining the purpose of the study, the international collaboration and link to a web-based survey (LimeSurvey). On 31 December 2012, two months after the initial invitation, the survey was closed. During this period from the target group of 170 students - 116 respondents answered the survey; 94 answered all questions; 22 not completed the whole survey.

In the first part of the study questions were asked that aimed to gather demographic information and information relating to the characteristics of respondents.

The students who participated in the study included: first year students (10.3 %); second year students (21.6%); third year students (39.6 %); fourth year students (21.6%); PhD students (5.2%); 1.7% of respondents skipped this question. The Grade Point Average (GPA) of the respondents according to the grade scale using in Bulgaria is: Excellent (5.50-6.00) – 36.2%; Very Good (4.50-5.49) – 40.5%; Good (3.50-4.49) – 6.0%; Average (3.00-3.49) – 0.9%; 16.4% of respondents skipped this question. The gender of respondents is: female – 78.4%; male – 19.0%; 2.6% of respondents skipped this question. The age range of respondents is the following: 18-20 years (7.8%); 21-23 years (30.2%); 24-26 years (12.1%); 27-29 years (12.9%); 30-32 years (8.6%); 33-35 years (11.1%); over 35 years (14.7%); 2.6% of respondents skipped this question.

The data obtained from this survey (includes 15 core questions) is valuable source of information and is subject to a thorough analysis to reach theoretical and methodological implementations. For the goals of this paper we will use only a purposeful *selected sample* which will serve the needs of the analysis of the *problem of Intellectual Property Competency as part of the Information Literacy of LIS students*.

2 Intellectual Property Competency as Part of the Information Literacy

An important task of LIS higher education programs is the building of Intellectual Property Competency as part of the Information Literacy of LIS students. This statement is based on established models and conceptions of information literacy. In 2011 the experts from a SCONUL working group on Information Literacy updated the Seven Pillars of Information Literacy as a generic “core” model for higher education [1]. One of the pillars is called “manage” and this is defined as – “can organize information professionally and ethically”. This underlines the personal responsibility to be honest in all aspects of information handling and dissemination including copyright, plagiarism and other intellectual property issues.

Mackey and Jacobson in their conception of reframing information literacy as a meta-literacy include as an important component the understanding of personal privacy, information ethics and intellectual property issues. They said: “An information-literate individual must be aware of these information surroundings and understand the ever-increasing impact that information and emerging technologies have on our lives. This requires an ongoing exploration of the legal, economic, political, and social issues that mediate our access to technology and often define the types of documents we evaluate and use” [2].

In the Lifelong Learning information literacy concept together with information skills, higher order thinking skills, format of information, other skills and literacies, other important component are related issues as follow: ethical, social, political, economic, personal, security [3].

3 LIS Education in Bulgaria and Intellectual Property Competency

The role of library and information education for dissemination of knowledge and information on intellectual property is recognized as very important in Bulgaria. In the curricula of bachelor, master and PhD programs offered at the State University of Library Studies and Information Technologies (SULSIT), and in the specialty “Library and Information Science” in the Faculty of Philosophy at Sofia University “St. Kliment Ohridski” and in the specialties in the Department of “Library and Mass Communication” at “The St. Cyril and St. Methodius” University of Veliko Turnovo following elements are included: protection of intellectual property; the intellectual property of the sources of scientific information, national and international legislation on intellectual property; and information policy and cultural policy.

SULSIT has contributed to the successful dissemination of knowledge in the field of intellectual property, as there are already 18 years of experience in intellectual property education and it is the university which has defined excellence in preparing students for intellectual property practice. Galabova [4] is the founder of teaching intellectual property in SULSIT and in “The St. Cyril and St. Methodius” University of Veliko Turnovo. SULSIT was one of the first universities in Bulgaria to target action to support the initiatives of the World Intellectual Property Organization and the European Patent Organisation. This included: creating in the university library an Intellectual Property Point as part of the university network of WIPO; developing and implementing a model of education of intellectual property for the needs of specialties in the Faculty of Library Science and Cultural Heritage and Faculty of Information Sciences (including the disciplines: “Intellectual Property Protection”, “New objects of Intellectual Property”, “Licensing of Intellectual Property”, “Licensing, know-how and Franchising”); establishment of a specialized collection of publications of the Patent Office of the Republic of Bulgaria and a database for patents and trademarks and providing online access to databases on intellectual property; and the development of various new forms of promotion and distribution of IP information and knowledge among students, teachers, librarians, information specialists and professionals in the field of culture and for all interested citizens.

4 Comparative Analyses

In this part of the paper we will make connections between some findings from the “Information Literacy Survey of LIS students” with data obtained from a survey conducted in the research project “Analysis of the common practices in the use of products of Intellectual Property in University Information Environment”. This survey was conducted among students in nine Bulgarian Universities accredited in the educational and professional field called “Public Communication and Information Science”. We could emphasize that the intellectual property competence is an essential part of the information literacy of students in this professional field, especially in terms of Internet usage and digital content. For that reason our main goal

is to compare some of the findings from both surveys to obtain conclusions for the actualizations of the academic programs of LIS specialties.

The results from the questionnaire survey “Information Literacy Survey of LIS students” showed that in carrying out the course-related assignments more than 51% of students *always or often* used materials from an Internet search engine (e.g. Google, Bing, Yahoo!, Ask.com); 24.5% from Wikipedia; 10.2% from Social networking sites (for example Facebook) in preparation for their tasks. In total 98 respondents answered the question “How often do you consult these resources for providing information during your course-related assignments”, as shown in Table 1. Most respondents used several sources of information in Internet.

Table 1. Information sources that students consult

	Always	Often	Some-times	Rarely	Never
Course readings	59	24	11	3	1
Search engines (Google, Bing, Yahoo)	50	42	6	0	0
Library catalogs	11	33	32	18	4
Encyclopedias (Britannica, print/online)	13	47	26	11	1
Governmental web sites (.gov. sites)	13	32	28	18	7
Data bases through library web site (e.g. WoS, EBSCO, ProQuest)	4	12	39	26	17
Gray literature (thesis, reports, etc)	5	33	27	28	5
Blogs	7	19	26	24	22
Wikipedia	24	39	15	15	5
Social networking sites (e.g. Facebook)	10	14	12	21	41
Video sharing sites (YouTube)	9	11	19	25	34
Slidesharing sites (e.g. Slideshare)	5	8	17	28	40
Online forums	9	12	24	23	30
Your personal collection	22	38	25	9	4
Library shelves	14	32	37	11	4

This biggest advantage of the Internet in today's society is that it is – fast and cheap to distribute to millions of users. However, this has created a most serious problem for the protection of content against unauthorized copying and use and hence the protection of intellectual property, in particular copyright content on the Internet is an issue.

Copyright as part of the intellectual property concept can be considered as an element of information literacy in the university information environment. To be successful both as university students and also in life, they need to learn how to use efficiently and effectively the wide variety of information and communication technologies for searching, finding, organizing, analyzing and evaluating the information. In addition, they must understand the ethical use of information, including the infringement of individual rights to intellectual property such as plagiarism, and the use of works of literature, art, science, and also of patented inventions, industrial designs, marks (trademarks, geographical indications, domain names, and companies) without the permission of the author. Finally, they must be

able to systematize all this knowledge together to create an effective end product. This requires them to assemble a complete package of basic skills for research, technological skills, critical thinking and evaluation [5].

4.1 Overview of the “Protection of Intellectual Property in the Internet” Survey

The survey¹ is based on the principle of systematic random selection with stratification to 10% of the students from specialties involved in the professional field “Public Communications and Information Science” of all universities in Bulgaria, having valid accreditation program for training in this professional field. Total number of these students is 5 700, according to the register of the National Evaluation and Accreditation Agency (NEAA), and the data refer to September 2012 [6]. The sample includes 9 universities in five towns in Bulgaria. The total number of the target group consists of 570 students surveyed efficiently, which makes the sample representative for the country [7]. From SULTIT there were covered 190 respondents. In view of the specificity and accuracy obtained from the survey data, the range of the target group was narrowed and only students in degree “Bachelor” were included in this analysis. The questionnaire survey was conducted during October – November, 2012 among the students who have studied or will study the subject of Intellectual Property Protection or a related discipline, including a module of copyright protection.

4.2 Summary of the Results from the “Protection of IP in the Internet” Survey

Students studying in the professional field “Public communication and information sciences” in Bulgaria are generally less familiar with copyrighted works, but impressive is the fact that there is a statistically significant difference between the students that had completed the Intellectual Property discipline and these that had not. The students that have learned such a discipline feel more confident and better informed on issues related to copyrighted works. Worrying is the fact that a large percentage of respondents did not think about copyright in the use of Internet materials for educational purposes, but once again there was a statistically significant difference between the students that had completed the IP discipline and these that had yet to complete the module.

It is noteworthy that there are a high percentage of the respondents who are not familiar with the ways of intellectual property protection on the Internet.

¹ “Protection of Intellectual Property in the Internet” Survey, realized as an initial stage of the project “Analysis of the common practices in the use of products of Intellectual Property in University Information Environment”, DMU 03/3, funded by the National Science Fund at the Ministry of Education and Science and managed by T. Trencheva.

Respondents from the group that had completed the IP discipline perceive the misappropriation of intellectual property and copyright on the Internet as a crime and they believe that the legal and judicial system is necessary to intensify the pressure on violators. It is noteworthy that students are aware basically who wins by the proliferation of unlicensed software, and many of them clearly state its negative position.

All respondents were familiar with the institutions involved in the protection of Intellectual Property [8].

5 Conclusions

The evaluation of findings of these two surveys – the first one with a focus on the *research experience, information behavior and information literacy skills of LIS students* and the other with the main goal to explore the *common practices in the use of products of Intellectual Property in University Information Environment* – allow us to reach two basic conclusions for optimizing the role and quality of library and information education in preparing future professionals in library and information and cultural affairs, according to the new demands of the information and digital reality, and copyright and legal issues.

First, it is important for LIS students to be introduced to intellectual property as early as possible during their formal education and to have the sustained development throughout all educational levels.

In accordance to this conclusion we have updated our curriculum in SULTIT. For example, in Library Management Department specialties, in the Bachelor Program “Library and Information Management” we prepared the following obligatory courses – Intellectual Property Protection; Information Literacy; Digitization and Copyright and we also offered one elective course of Intellectual Property in Internet. In the Master’s Program “Library, Information and Cultural Management” we have two obligatory courses: Licensing of Intellectual Property and Transparency and Accessibility of Information.

Second, for the educational process in the field of intellectual property the recommendations for IL programs are applicable. Kurbanoglu summarizes: “In order for information literacy programs to be effective, they must be truly integrated into the core curricula. Information literacy should be woven into content, structure, and sequence of the curriculum. Information literacy cannot be the outcome of any one subject. It is the cumulative experience from a range of subjects and learning experiences which creates the information literate person” [9].

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