Qualifications of information specialists: case of library and information students at the Department of Information Science, Faculty of Philosophy, University of Zagreb, Croatia

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1 Introduction

The current trend in the world is that of massive information production. New power in all areas of life is reflected in the amount of information possessed and offered. A specific situation in Croatia is that the information society has only just started to be built and information that would be on offer still need to be created. Only few Croatian information institutions (several libraries, and none of the archives and museums) have computer-based catalogues that can be accessed via the World Wide Web. On the other hand, powerful business firms have already created databases with all the information they need; they also have an elaborated network of information channels. The information institutions require information specialists to develop information systems, and the business firms need them to maintain the existing ones. Consequently, education in information science has started to gain recognition and importance, for in the information society, there is a need for «.... people with an understanding of the many facets of the information process- from

collection and storage to dissemination and use. And, they need to have technical skills to support that understanding» (Sherron, 1997, p. 157).

The rapid development of information and communication technology in the past several years has called for re-examination of LIS curricula in the world and for that reason the research had to be conducted at the Department of Information Science, Faculty of Philosophy, University of Zagreb (hereinafter called "Department"). The results of the research would will serve as guidelines for improvement of the existing educational programme and teaching quality.

2 Educating information specialists today

Technological changes are reflected in LIS programmes in extending the context of information to the virtual world of the Internet and provision of information in a variety of contexts, whereas in the past LIS programmes focused on developing physical collections in library buildings (Guidelines for professional library/information educational programs, 2000). Apart from information technology, changes in the LIS education in the West have resulted in enriching the curricula with business and management areas in order to satisfy the demands of a labour market. It especially refers to information management, organisation and presentation. According to ALA Standards for Accreditation of Master's Programs in Library and Information Studies (Standards for accreditation of Master's programs in library and information studies, 1992), LIS education should base on programme objectives that should reflect "the essential character of the field of library and information studies; that is, recordable information and knowledge, and the services and technologies to facilitate their management and use, encompassing information and knowledge communication. identification. acquisition. creation. selection. organisation and description, storage and retrieval, preservation, analysis, interpretation, evaluation, synthesis, dissemination, and management..." and "...the role of library and information services in a rapidly changing technological and global society».

The curriculum concept should comprise a broad general education and core elements. It should incorporate practice, internship or fieldwork as well (Guidelines for professional library/information educational programs, 2000). The core elements should provide for "the study of theory, principles, practice, and values necessary for the provision of service in libraries and information agencies and in other contexts..." "The curriculum is concerned with recordable information and knowledge, and the services and technologies to facilitate their management and use. The

curriculum of library and information studies encompasses information knowledge creation, communication, identification. selection. acquisition, organisation and description. storage retrieval. and interpretation. preservation. analysis. evaluation. synthesis. dissemination, and management" (Standards for accreditation of Master's programs in library and information studies, 1992).

3 Conception of LIS educational programme at the Department of Information Science, Faculty of Philosophy, University of Zagreb

At the Department of Information Science the educational programme is based upon information institutions (archives, museums, libraries) and software development in the field of social sciences and humanities.

The problem of the Department was that, on one hand, it was influenced by Božo Težak's idea that information should be researched, studied and educated within the field he called "informatology", and not related to an institution (Lasić-Lazić, 2000, p. 132). On the other hand, the Department also focused on acquiring skills that would be required at information institutions from information specialists with a diploma. After a period when it was necessary for the Department to focus only on the latter in order to survive, the problem has arisen in keeping up with academic standards. The problem in Croatia is still present- market for information specialists is yet to be formed and no required skills can be proscribed.

The programme consists of four different curricula. First two years are a common core within which students gain basic knowledge from areas of information science, such as knowledge organisation theory, classification theory, basics of programming, and alike. On the third year students can chose one out of four programmes: librarianship, museology, archival studies or informatology. Each programme provides knowledge that builds upon the first two common years, with a focus on courses that make the core of a certain information science area.

4 Research Analysis

4.1. Introduction to the research

The research of students at the LIS Department was intended to determine the students' level of knowledge, attitudes, satisfaction and expectations related to the educational programme. Comparing the

existing LIS programme at the Department with contemporary LIS education trends, it was attempted to point to problems of the Department's programme and to employ the results of the research in proposition for a Department's developmental strategy.

The research was motivated by deliberation on the following issues:

- the profile of students enrolling in the Department;
- students' motives to enroll in the Department;
- · expectations of students enrolled in the Department;
- fourth-year students' satisfaction with quality of the educational programme at the Department;
- knowledge gained at the Department;
- students' satisfaction with specific segments of education at the Department; and
- whether students have a vision of what knowledge is required for the future information specialist.

The purpose of the research was to:

- get an insight into students' opinions about studying at the Department;
- improve education according to students' requests where possible;
 and
- point to weak segments of the Department (specific services and educational segments).

The main purpose of the research was to collect a sufficient number of information that would imply ways in which students perceive education of information science at the Department, what they expect from it, as well as to adapt segments of the Department's programme and make improvements according to students' requests.

There were two main hypotheses:

- the educational programme does not fulfil the needs of fourth-year students; and
- fourth-year students can critically evaluate the programme and express opinions on what the programme should be like and what it should include.

4.2. Sample and methodology

Ninety-one students studying at the Department of Information Science were included in the research. The respondents were divided in two groups— first-year students and fourth-year students, in order to define

attitudes of different student categories. The first group consisted of students who have just started studying and who can tell us what they expect from the programme and what their reason for enrolling was. The second group can critically review the existing educational programme and evaluate it.

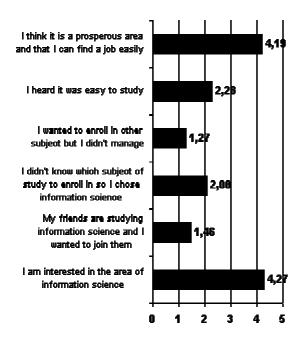
The research was conducted with questionnaires consisting of structured and unstructured questions. Due to the fact that there were two groups of respondents, two different questionnaires were created. The focus of the questionnaire for first-year students was on expectations related to the information science educational programme, reasons for choosing the information science programme of study and expectations of studying in general. The second questionnaire focused on evaluation of knowledge gained during the past three years of study, participation in various activities at the Department and satisfaction with particular segments at the Department, such as the library, educational programme, tutorials and practical parts.

The data collected were processed with SPSS statistical software package. Ninety-one questionnaires were processed. Statistical analysis applied were frequency analysis and chi-square test.

4.3. Analysis

Students enrolling in information science programme at the Department are mostly women (69.7%), with a variety of secondary-school educational background (from grammar schools to a range of vocational schools). The majority of respondents own a computer (78%) for several years (approximately 4 years). The majority also uses the Internet frequently or often (82.2%). These data indicate that the respondents possess basic computer skills and basic knowledge from areas of information science.

The issue of motivation to enroll in the information science programme is one of the basic questions we were interested in. The motives vary, and the answers offered were: interest in the area of information science, prosperous area with great possibilities for finding a job, influence of a friend, impossibility of enrolling in another subject, easy studying and an easy way to get a diploma.



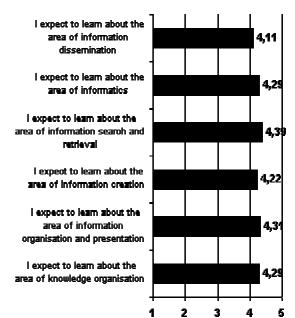


Figure 1 Why did you decide to enrol in the information science programme of study?

Figure 2 What are your expectations concerning studying information science?

In order to be able to understand answers to this question, it is first necessary to get acquainted with an existing problem. As active participants in education, after several years of observation and conversations with students, we have noticed that one of the reason for enrolling is that the study of information science is not very rigid for students or that they enrolled in information science as their secondary subject, what enabled them to focus more easily on their main subject.

The analysis proved that the respondents' motivation was mainly interest in the area of information science, or they think it is a prosperous area with good possibilities for finding a job. However, we should take this with a qualified acceptance because a significant percentage of students (20-25%) answered that they enrolled because of their uncertainty or as a secondary subject (of a two-subject study).

It was presumed that students expect to get familiar with knowledge organisation, information representation and organisation, information creation, information search and retrieval, with areas of informatics and information dissemination. Expectations of first-year students and acquired knowledge of fourth-year students differ significantly. Expectations of first-year students are high in all the options offered. The scale for expectation assessment consisted of five degrees, where one stood for not expecting at all, and five for expecting fully. Average values show high rating for all the options (4.11-4.39). There is no statistically significant difference between first-year and last-year students apart from

in the variable for informatics knowledge. First-year students expect more knowledge (4.6) than their older colleagues gained (3.96).

At the Department of Information Science education has two forms-lectures based on theory and practical parts (practicum). Four-year respondents rated the level of knowledge gained during the past four years of study. Answers were scaled from one to five, where one stands for dissatisfaction because the respondent gained no knowledge at all from the areas selected during the past three years, and five stands for satisfaction with the knowledge gained. From a range of theoretical and practical knowledge that a student can gain during the educational programme we selected the same areas as listed in the first-year questionnaire question on expectation, i.e. knowledge organisation, information representation and organisation, information creation, information search and retrieval, areas of informatics and information dissemination. Expectations of students are more positively ranked than knowledge actually gained during the study. When students enroll, they expect more than the programme can offer.

The graph shows that students assess more negatively knowledge related to practical work than that related to theory.

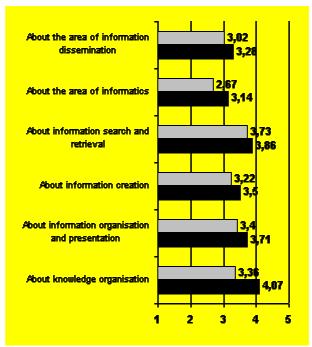


Figure 3 What knowledge have you acquired during the past three years?

Students' projects are part of the Department's curriculum. More and more students get actively involved in the projects, but the research results prove that there is a problem of students not being informed about

the possibility of the projects (28.9%); the bigger problem is that students are disinterested in participation (24.4%).

There is also fieldwork encompassing symposiums and seminars, visits to archives, libraries and museums as well as other information institutions in Croatia and abroad. Forty percent of the respondents participated in the fieldwork, but the percentage of students who are not aware of the fieldwork is also high (20%).

Fourth-year students assessed their satisfaction with the study on the basis of their experience. Ratings referred to the quality of study (quality of lectures, programme, quality of practicums, student internship and fieldwork) as well as to particular segments at the Department (administration office, library). On the scale of five, one stood for complete dissatisfaction with the study, and five for complete satisfaction. The respondents are most satisfied with library services (average 3.98), and least with administration services and received general information about studying (average 2.55-2.77). Other elements are positively rated (average 3.26-3.98).

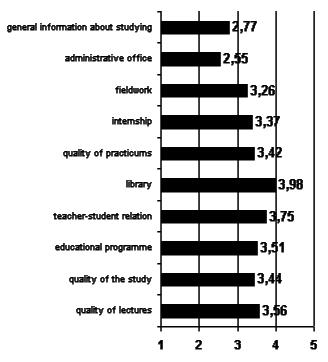


Figure 4 Estimate the level to which you are satisfied with the following segments in the past three years of studying at the Department.

Suggestions of students referring to the programme refer primarily to requests for improving quality of practical training (the majority of respondents complain of practicum insufficiency), introducing courses

dealing with computers and the Internet, as well as ensuring practical training parts where computer and Internet skills would be acquired. The respondents want courses dealing with software programming and applications usage for they believe those skills would help them get a job more easily.

5. Conclusion

Changes of educational programmes in information science are imposed as a must due to fast developments in the information society and particularly due to shifts in the world of business for which students are being educated. In order to prepare students to achieve success in this world, our role is to supply them with as many information as necessary or to get them acquainted with a certain area and equip them with basic knowledge to build upon and develop.

Taking a picture of students' attitudes about the study of information science is a part of a larger research, which will be applied in forming the Department's educational programme. Opinions of students are an important indicator of the programme's quality as they are the ones who would have to apply the acquired knowledge in their everyday work.

Expectations of first-year and fourth-year students, as related to satisfaction of students during the study, differ significantly. Students enroll in the study of information science mostly because they are either interested in the area of information science or they hope to get a job more easily. However, a large percentage of students enroll because they actually do not know what to study or this subject is only a cover for the main subject of study. Students' expectations are more positive in relation to knowledge gained during the four years. As the main problem singled out is a difference in lecture quality (theory) and practicum quality (practice).

Based on the analysis of four-year students' answers several areas not sufficiently present in the Department's educational programme were sorted out. Students primarily pointed to the problem of quality practicums that are, in their opinion, insufficiently covered by the programme. The same is true for courses dealing with computers in general. This primarily refers to the need to get acquainted with the area of programming and applications that are basic for the profession, as well as to introducing the courses on marketing and communicology.

The results of this short research are a confirmation to the hypothesis that stretches throughout the area of information science and refers to the fact that knowledge of an information expert is one of the most volatile ones. Quick and constant shifts force both educators and learners to permanent adaptation and observation of «what is to take place». Information science students can not expect from the educational programme to acquire permanent values that they would be able to apply. What they can expect is knowledge and skills that would prepare them and direct them for acquiring knowledge specific for a variety of working environments, knowledge for adaptation and development, which calls for constant development and growth.

Bibliography

- 1. Sherron, G. T. A new approach to information education. // Education for information, 15(1997), pp. 153-169.
- 2. McGarry, K. J. Undergraduate degree in information and library studies: a retrospect and revaluation. // Education for information, 15(1997), pp. 105-123.
- Guidelines for professional library/information educational programs 2000.
 http://www.ils.unc.edu/daniel/IFLA/Guidelines2000.html
 (22-10-2001)
- 4. Standards for accreditation of Master's programs in library and information studies 1992. http://www.ala.org/alaorg/oa/standard.html (22-10-2001)
- 5. Lasic-Lazic, J.; Slavic, A. Organization and management of information professionals education. // Informatologija, 33,3-4(2000), pp. 198-202.
- 6. Lasic-Lazic, J. Doprinos Bože Težaka obrazovanju informacijskih stručnjaka i bibliotekara = Contribution of Božo Težak to the education of information experts and librarians. // Informatologija, 31, 3-4(1998), pp. 131-134.

Biographies

Vjekoslav Afrić is a professor at the Department of Sociology, Faculty of Philosophy, University of Zagreb. He teaches Social Antropology, Research Methods in Anthropology, Research Methods II and Building Simulation Models in Sociology at the undergraduate level. He also teaches graduate courses at the Department of Sociology and the Department of Information Science. His special interests are epistemological and methodological issues in sociology.

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