

Defining Information Literacy Competences in a Professional Framework of Library and Information Professionals in Croatia

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Abstract. This paper presents the main findings of research conducted with the aim of proposing and exploring a professional framework for library and information professionals in Croatia. Two online surveys were conducted among key library and information stakeholders in Croatia, and part of the *Tuning* methodology was applied for the purpose of identifying subject-related and generic competences in the library sector in Croatia. The results revealed that all respondents agreed on one distinctive core of subject-related competences which consists of user-centered and information-based competences, and which were identified as information literacy competences. Information literacy competences are valued equally highly by labor market stakeholders as in academia, while subject-related competences within the competence periphery point to differences in opinions among all respondents. Generic competences were highly rated by all respondents.

Keywords: Information literacy competences, library education and training.

1 Introduction

The aim of this paper is to address information literacy competences in library and information science (LIS) in Croatian higher education and in professional practice. The findings reflect national historical givens and current development in the library field.

The first university library school was introduced in 1976 at the Faculty of Philosophy, Zagreb University, and was characterized by its interdisciplinary approach to library study [1]. Before the introduction of the Bologna reform in 2005, which initiated a formal revision of the program in order to follow the 3+2 cycle, more than 650 students had graduated in librarianship. The current library program at the University of Zagreb has been carried out by a faculty of 25 teaching staff. Two additional LIS graduate programs were introduced in 1998 at the University of Osijek, and in 2003 at the University of Zadar. Content analysis of all three graduate library programs revealed that graduate librarians in Croatia acquire subject-specific competences

through one or more core or elective courses and that there is a tendency toward certain program generalization regarding information sciences [2]. Research on the prerogatives and quality of library education in Croatia, and on the knowledge and skills of alumni and their further professional development have been actively conducted [3]. However, it has become evident that a holistic approach to define core competences in the common professional framework is very much needed.

2 Research

The research was designed to analyze the perception of key stakeholders in LIS in Croatia: academics at library schools, library professionals, and library directors and their views on subject-related and generic competences in a potential professional framework of LIS in Croatia. The presented findings were obtained as part of doctoral research [4] on competences in LIS in Croatia, carried out within the project Lifelong Learning for Librarians (CUK), supported by the National Foundation for Science, Higher Education and Technological Development in 2008 (<http://www.nsk.hr/cuk>). In this research, only the findings related to the identification of information literacy competences and their status in the context of professional framework are presented and analyzed.

Tuning [5] methodology was applied in part for the purpose of identifying subject-related and generic competences in the library sector in Croatia. As the aim of *Tuning* is “to develop reference points for common curricula on the basis of agreed competences and learning outcomes as well as cycle level descriptors for many subject areas”, for the purpose of our research, more limited *Tuning* methodology was applied. As part of the limited *Tuning* methodology, two online nationwide surveys were conducted. The first survey was performed in 2009 among library professionals and library directors, and the second in 2012 among LIS academics at three Croatian universities. Three separate online questionnaires were created, one for the academics, one for library professionals and the third for library directors. The main part of all three questionnaires was identical for all three research groups, asking the respondents to rate 21 subject-related and 14 generic competences from the point of view of their importance for the profession and the level of achievement of graduate librarians at the library schools in Croatian universities. A 5-point Likert scale was applied, where 1 stands for less important or less acquired, and 5 for the most important or the most acquired competence by graduate librarians.

For the purpose of defining a set of subject-related competences that should be included in questionnaires, the IFLA SET *Guidelines for professional library/information educational programs* [6] was consulted. *The Guidelines* propose core elements that should be included in an academic LIS program. A set of generic competences was acquired from the OECD *DeSeCo* [7], a document whose aim is to help define and select key competences. A proposed set of competences was discussed and agreed among participants (academics and graduate librarians) during two CUK project workshops, held on April 6th and May 22nd 2009 in the National and University Zagreb. The method of triangulation of data was applied for the analysis of the results.

3 Findings

In total, 16 academics, 266 graduate librarians and 113 library directors responded to both online surveys. The stratification of respondents by university and by type of library is presented in Table 1. An analysis of the socio-demographic characteristics of librarians and library directors shows that library and information professionals in Croatia are middle-aged females, with a median age of 41.0, among whom the highest percentage are graduate librarians with short experience in a library (up to five years).

Table 1. Stratification of respondents by university and by type of library

	<i>Respondents</i>						<i>Total</i>
	University of Zagreb		University of Zadar		University of Osijek		
Academics	N	%	N	%	N	%	16
	9	56.00	4	25.00	3	19.00	
Librarians	Public libraries		School libraries		Academic libraries		266
	N	%	N	%	N	%	
	161	60.00	54	20.00	51	20.00	
Directors	36	31.00	55	48.00	22	21.00	113

3.1 Importance and Achievement of Subject-Related and Generic Competences

All three research groups agree upon the most important subject-related competences. Ranking in order of importance and in level of achievement of subject-related competences is shown in Table 2. When comparing an average value of the importance of competences for the profession, certain statistical differences in opinions of all respondents are indicated. The most important average subject-related competences obtained from all respondents are user-centered competences: Information Searching & Retrieval (4.93), Providing Information to Users (4.91), Information Resource Management (4.89), and Assessing Information Needs & Designing Responsive Services (4.88).

The negligibly small differences of opinions of all three research groups are for the competences of 'bibliographical paradigm' [8], i.e. Cataloguing, and Classification, followed by Research & Analysis of Information, and Information Policy & Ethics. Competences within the curriculum periphery indicated significant differences in opinions when comparing the opinion of academics on the one hand and the opinions of librarians and directors on the other. Although labor market stakeholders, librarians and library directors valued all subject-related competences as more highly important (4.41) than academics (4.22), the academics more clearly demarcated core competences from those they believed of less importance for the profession and which should be regarded as belonging to the curriculum periphery.

Competences such as Knowledge Creation, Teaching Skills, and Media Skills were highly valued by labor market stakeholders. Digital Collection Management is the only subject-related competence that was less valued by labor market stakeholders

(-0.2) than by academics (0.34). It appears that this competence has not yet achieved its market value.

According to the academics, nearly all subject-related competences were considered highly achieved by graduate librarians during their study (3.81), while librarians (3.28) and directors (3.44) rated competence achievement more critically.

The most highly achieved competences by graduate librarians in the opinion of all respondents were Cataloguing (4.41), and Theory & History of the field (4.04).

Table 2. Ranking in order of importance and in level of achievement of subject-related competences

<i>Subject-related competences</i>	Level of Importance				Level of Achievement			
	<i>Academics</i>	<i>Librarians</i>	<i>Directors</i>	<i>Total</i>	<i>Academics</i>	<i>Librarians</i>	<i>Directors</i>	<i>Total</i>
Information Searching & Retrieval Providing	5.00	4.91	4.88	4.93	4.31	3.60	3.78	3.90
Information to Users	4.94	4.92	4.88	4.91	4.19	3.58	3.63	3.80
Resource Management	4.94	4.88	4.85	4.89	4.44	3.58	3.78	3.93
Assessing Information Needs & Designing								
Responsive Services	4.88	4.89	4.87	4.88	3.88	3.59	3.61	3.69
Collection Management	4.69	4.44	4.33	4.49	4.06	3.17	3.19	3.47
Digital Collection Management	4.69	4.17	4.19	4.35	3.94	2.66	3.11	3.24
Classification	4.50	4.64	4.56	4.57	3.94	3.50	3.63	3.69
Information Policy & Ethics	4.50	4.52	4.48	4.50	3.88	3.74	3.65	3.76
Cataloguing	4.38	4.49	4.50	4.46	4.56	3.95	3.91	4.14
Information & Communication								
Technologies	4.19	4.63	4.71	4.51	4.06	3.43	3.77	3.75
Advocacy	4.19	4.57	4.64	4.47	3.19	2.86	3.03	3.03
User Education	4.13	4.59	4.71	4.48	3.31	3.16	3.24	3.24
Library & Information Products & Services	4.13	4.50	4.38	4.34	3.88	2.96	3.24	3.36
Research & Analysis of Information	4.06	4.09	4.14	4.10	3.81	2.93	3.27	3.34
Preservation & Conservation	4.00	4.28	4.24	4.17	3.88	3.69	3.63	3.73
Theory & History	3.75	3.65	3.51	3.64	3.81	4.26	4.05	4.04
Digitization Process	3.63	3.89	3.96	3.83	3.88	2.41	2.91	3.07
Knowledge Creation	3.56	4.42	4.37	4.12	3.13	3.06	3.35	3.18
Teaching Skills	3.56	4.13	4.36	4.02	3.25	2.98	3.22	3.15
Media Skills	3.50	4.38	4.43	4.10	3.25	2.89	3.22	3.12
Publishing Process	3.44	3.61	3.64	3.56	3.36	2.81	3.10	3.09
Total average	4.22	4.41	4.41	4.35	3.81	3.28	3.44	3.51

Table 3. Ranking in order of importance and in level of achievement of generic competences

<i>Generic competences</i>	Level of Importance				Level of Achievement			
	<i>Academics</i>	<i>Librarians</i>	<i>Directors</i>	<i>Total</i>	<i>Academics</i>	<i>Librarians</i>	<i>Directors</i>	<i>Total</i>
Elementary								
Computer Skills	4.88	4.79	4.83	4.83	4.56	3.56	4.13	4.08
Information								
Management Skills	4.88	4.83	4.79	4.83	4.44	3.44	3.77	3.88
Teamwork	4.81	4.73	4.76	4.77	3.81	3.23	3.39	3.48
Ethical Commitment	4.69	4.83	4.77	4.76	4.13	3.79	3.91	3.94
Capacity to Learn	4.75	4.68	4.71	4.71	4.06	3.75	3.85	3.89
Communication								
Skills	4.44	4.85	4.81	4.70	3.81	2.99	3.41	3.40
Capacity for applying								
Knowledge in								
Practice	4.56	4.70	4.59	4.62	4.13	3.41	3.56	3.70
Ability to work								
autonomously	4.56	4.59	4.66	4.60	4.25	3.29	3.45	3.66
Capacity to adapt to								
new situations	4.38	4.7	4.68	4.59	3.88	2.96	3.19	3.34
Leadership &								
Management Skills	4.50	4.39	4.55	4.48	3.81	2.96	3.07	3.28
Critical &								
Self-Critical Abilities	3.88	4.46	4.48	4.27	3.50	3.09	3.36	3.32
Second Language	4.13	4.30	4.33	4.25	3.75	3.32	3.68	3.58
Research Skills	4.19	4.04	4.11	4.11	3.81	3.25	3.40	3.49
Will to Succeed	4.00	3.88	4.15	4.01	3.36	3.15	3.48	3.33
Total average	4.48	4.56	4.59	4.54	3.95	3.30	3.55	3.60

Ranking in order of importance and in level of achievement of generic competences is shown in Table 3. The most important generic competences according to all respondents were Elementary Computer Skills (4.83), Information Management Skills (4.83), Teamwork (4.77), Ethical Commitment (4.76), and Capacity to Learn (4.71). Academics ranked the importance of generic competences more critically (-0.06) than labor market stakeholders. The achievement rank for all generic competences expressed totally opposite directions when the opinions of academics were compared with the opinions of library professionals and library directors. The academics considered that all generic competences were more highly achieved by graduate librarians (0.35).

3.2 Importance-Performance Analysis of Subject-Related Competences

Difference between the average value of the importance of subject-related competences (4.22) and the average value of competence achievement by graduate librarians (3.81), reveals the opinion of academics on the efficiency of the LIS education in Croatia (-0.41). The largest differences between the importance and the achievement of competences are in Assessing Information Needs & Designing Responsive Services (-1.00), Advocacy (-1.00), User Education (-0.82), Providing

Information to Users (-0.75), Digital Collection Management (-0.75), and Information Searching & Retrieval (-0.69). According to the academics, these competences are less achieved by graduate librarians than they are valued for their importance.

The Importance-Performance Analysis (IPA) [9] is used to investigate the importance and the achievement of subject-related competences as perceived by all respondents (Fig. 1). The IPA approach is seen as a means to measure respondent’s satisfaction. The importance and the achievement values are compared in two pairs of coordinate axes. The intersection in the IPA is made available using the average of importance at 4.35 and the average of achievement at 3.51. Subject-related competences were arranged into four categories: **concentration** for competences that are considered important but have low achievement; **low priority** for competences that are not considered important and have low achievement; **excess effort** for competences that are not considered important but have high achievement, and **maintenance** for competences estimated both as highly important and as highly achieved.

Importance	CONCENTRATION:	<ul style="list-style-type: none"> - Collection Management - Digital Collection Management - User Education - Advocacy 	MAINTENANCE:	<ul style="list-style-type: none"> - Cataloguing - Classification - Assessing Information Needs & Designing Responsive Services - Information Policy & Ethics - Information Resource Management - Information Searching & Retrieval - Providing Information to Users
	LOW PRIORITY:	<ul style="list-style-type: none"> - Digitization Process - Library & Information Products & Services - Knowledge Creation - Media Skills - Publishing Process - Teaching Skills 	EXCESS EFFORT:	<ul style="list-style-type: none"> - Theory & History - Information & Communication Technologies - Preservation & Conservation - Research & Analysis of Information
		Performance (Achievement)		

Fig. 1. Diagram Importance-Performance Analysis (IPA)

The IPA diagram shows that Collection and Digital Collection Management, User Education and Advocacy are perceived as of high importance but of low achievement by all respondents. It seems that, according to all respondents, a part of a core curriculum requires more effort or more investment in order to increase the level of achievement by graduate librarians. Most of the competences are arranged in the field of maintenance, including information literacy competences. Great efforts had been invested in the competences arranged in the quadrant of excess effort (Theory & History, Research & Analysis of Information, Information & Communication Technology, and Preservation & Conservation). Competences with low importance and low achievement are those arranged in the field of low priority, such as Digitization Process, Library & Information Products & Services, Knowledge Creation, Media Skills, Publishing Process, and Teaching Skills.

4 Discussion - Information Literacy Competences

Kajberg, Horvat and Oğuz stated that “a growing interest in information literacy has been seen as a field of research and analysis, as a policy area and as a curriculum subject” [1]. Our research examined information literacy competences as a curriculum subject. Findings revealed that all respondents agreed on one distinctive core of subject-related competences consisting of user-centered and information-based competences, and which was identified as information literacy competences [10]. According to the results of the IPA approach, information literacy competences appear in conjunction with competences of the ‘bibliographical paradigm’ in a steady maintenance area, while User Education is in the concentration quadrant. The reasons for a certain inability of the academic curriculum to achieve its goals in respect of information literacy has been researched by Heidi [11], who concluded that information literacy courses have been mainly part of elective courses. Information literacy competences are valued as highly by labor market stakeholders as by academics.

5 Conclusion

Although the findings cannot lead to a of generalization of conclusions on the core curriculum in LIS, they may serve as a starting point for further analysis of the attributes of information literacy competences from the perspective of the professional framework.

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