Knowledge, Skills and Attitudes of Librarians in Developing Library Users' Information Literacy

Jaana Kulbin and Sirje Virkus(✉)

Institute of Information Studies, Tallinn University, Tallinn, Estonia
Jaana.Kulbin@sisekaitse.ee, sirje.virkus@tlu.ee

Abstract. The objective of this study was to explore how Estonian librarians assess their information literacy (IL) and which knowledge, skills and attitudes they consider important in facilitating the development of IL of library users. The research strategy chosen was a multiple case study. Document analysis, semi-structured interviews, and expert interviews were the main data collection methods. The study results revealed that librarians needed knowledge and skills in pedagogy and andragogy, instructional design, information technology, foreign languages, marketing, information sources and databases as well as on the learning domain. They also highlighted social skills and found that personal characteristics and attitudes of librarians were very important in facilitating IL. The study participants expressed the view that all librarians and information professionals must be able to advise users individually to facilitate their IL, but not all should be required to deliver courses and lectures for a group of students or library users.

Keywords: Information literacy · Librarian · Information professional · Vocational schools · Higher education institutions · Universities · Competencies · Teaching · Facilitating · Training

1 Introduction

Rapid changes in the academic and information environment constantly raise new requirements for the competence of many professions including the library and information profession. The library and information profession is "a dynamic, ever-changing profession, as meeting user expectations requires adjustments to new needs with emergent technologies and embracing other external factors that impact the twenty-first-century workforce" [1, p. 64].

The objective of this study was to explore how Estonian librarians assess their information literacy and what knowledge, skills and attitudes they consider important in facilitating the development of information literacy of library users.

The central research question of our study was: what knowledge, skills and attitudes do librarians need to facilitate the development of information literacy of library users in vocational and higher education institutions?

In order to find an answer to the central research question we formulated the following sub-questions: How do librarians define information literacy? How do

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librarians enhance information literacy of library users? What knowledge, skills and attitudes do librarians need to facilitate the development of information literacy of library users? Do librarians have the necessary knowledge, skills and attitudes to facilitate the development of information literacy of library users? How could librarians acquire or enhance the necessary knowledge, skills and attitudes to facilitate the development of information literacy of library users? Do all librarians need to be able to facilitate the development of information literacy of library users?

This paper briefly reviews the existing literature on the topic and reports the results of the study.

2 Competencies for Librarians

Discussions about relevant competencies for librarians are not new. There are many articles in the library literature on core competencies for librarians and information professionals in general and on competencies for specific types of libraries or for specific library jobs. For example, publications discuss competencies for academic librarians [2–7], public librarians [8, 9], school librarians [10], health or medical librarians [11–13], law librarians [14, 15], electronic resources librarians [16], reference librarians [17, 18], metadata librarians [19], acquisitions librarians [20], science collections librarians [21] or librarian 2.0 [22–24].

In the higher education context there are many discussions about the role of the library and the literature of librarianship presents a complex picture of how library can support university education [25–30].

Doskatsch [26] elaborated on the following requirements for the librarians involved in the teaching and learning process: to engage in critical reflection and move from a library-centred view of information literacy towards viewing information literacy as a holistic educational outcome based on transferable concepts and skills; to understand the institution's teaching and learning framework, educational policy and strategy, terminology and the context; to have good negotiation and conflict management skills; to understand different learning styles and teaching methods; to understand students' academic requirements and learning support resources in traditional and digital environment; to have a considerable knowledge and experience with information systems and information technology to support students' learning; to have a collaboration skills to work with faculty in using active learning methods; to have competencies to design, develop, deliver and evaluate information literacy programmes in traditional and digital environment and integrate information literacy into the curriculum.

Kirk [31] has indicated specific elements essential for the success of academic librarians. These skills cluster into the three main categories of design, delivery and evaluation. The teaching librarian also needs deep knowledge of specific subject fields.

Peacock [27, p. 13] notes that "complex role demands more than sound pedagogical knowledge, advanced teaching skills and an ability to develop and deliver effective learning experiences. It also requires that the teaching librarian functions as an educational professional; that is, as one who can engage in educational debate and decision-making processes, influence policy, forge strategic alliances and demonstrate diplomatic sensitivity."

Peacock [28, p. 27] urged academic librarians to position themselves as key educators in the educational environment, and acquire an educational competence and professional confidence equal to that of their academic peers. Peacock argues that the relative inequality of librarians and academics prevents library professionals from fully integrating information literacy into curricula. Peacock suggests developing a new generation of librarian educators, retrained as 'learning facilitators' and forging campus-wide 'alliances' to ensure that librarians and libraries to overcome their marginalisation.

Bruce [32] notes that in the last decade we have seen continued and increased focus on the important contribution that libraries have to learning, in public, school, academic, and special libraries.

Virkus [33] found that there were different views about the role of librarians as teachers in the process of facilitating the development of information-related competencies. She prefers to use the term 'information-related competencies' instead of 'information literacy' [34]. Several senior managers and academics supported this idea, some were against it. Several academics found this idea excellent and worthy of attention but also clearly indicated that it would be an exception rather than the accepted practice. Several senior managers and academics saw the library first and foremost as a service, resource or support centre even if they did acknowledge the role of librarians in the process of facilitating information literacy. However, comments from several senior managers and academics revealed that they did not believe that librarians should have a teaching role within the university. Several senior managers and academics found this idea interesting, but hesitated as to whether it should be a general practice. The views of librarians also differed with regards to the teaching role. Several librarians did not believe that teaching should be their responsibility. One librarian expressed very clearly that she did not want to be a teacher and if she did then she had taken a teaching qualification. However, several librarians still indicated that quite often they had to take the role of the teacher or tutor when students came to the library and asked for academic advice. Several librarians expressed the view that librarians can take on a teaching role and were pondering how to develop their pedagogical knowledge and skills. Students also had different views regarding librarians as teachers. Some of them thought that librarians can be teachers, some of them did not expect that role from librarians and others had no clear position on that. Several librarians saw the role of the librarian more as a consultant and as an active member of the course development team. It seemed that misunderstandings of different actors' roles and responsibilities in academia might create counterproductive behaviours and might misdirect design of the programmes for information literacy [33].

Several authors have asked how many librarians are qualified for roles as teachers or facilitators [26, 29, 35]. Elmborg [36] believes that librarians are not prepared for these changing roles and suggests that library and information science education should better address this need.

Calzada Prado and Marzal [37] analysed main professional competency standards and courses currently offered in accredited graduate programmes in the United States, Canada, United Kingdom, and Australia. Results suggest that although some relevant competencies have been included by professional associations in their competency standards for all types of information professionals, instructional competencies have

not received much attention in graduate educational programmes other than in concentrations or tracks targeted at future school or academic librarians.

Thus, with this background we initiated this study.

3 Research Methods and Procedures

The research strategy we used in this study was a multiple case study within a post-positive paradigm. Several researchers suggest that a case study is a preferred strategy when 'how' or 'why' questions are being posed, when a phenomenon is complex and includes contemporary sets of events, when the researcher has little control over events and in-depth investigation is required, or when a phenomenon cannot be studied outside the context in which it occurs and there has been little or no previous research on the topic [38–41]. Denscombe [41, p. 31] notes: "Relationships and processes within social settings tend to be interconnected and interrelated. To understand one thing it is necessary to understand many others and, crucially, how the various parts are linked" and the case study strategy is suggested in those settings.

The case study is a holistic research strategy that combines several data collection methods [42]. However, the case study strategy does not dictate strictly which methods must be used [41, p. 32]. The main advantages of the case study research are: it provides in-depth and rich information of complex social situations; can explain complex causal links in real-life interventions; encourages the use of multiple methods to provide a richer picture of the phenomenon than would any single method; it often provides light on sensitive things that are difficult to study in other ways [38, 41, 43, 44]. Thus, a case study research strategy met the requirements of this study.

Yin [38, p. 46] notes that multiple-case study designs have increased in research methodology and highlights the point that multiple-case designs have distinct advantages in comparison to single-case designs. Following the suggestions of Herriott and Firestone [45], he notes that "the evidence from multiple cases is often considered more compelling, and the overall study is therefore regarded as being more robust." Yin [38, p. 53] believes that most multiple-case designs are likely to be stronger than single-case designs and "the analytic benefits from having two (or more) cases may be substantial."

However, Yin notes [38, p. 47] that the conduct of a multiple-case study can require extensive resources and time often beyond the means of single student or independent research investigator. Therefore, the decision to undertake multiple-case studies cannot be taken lightly and every case should serve a specific purpose within the overall scope of inquiry.

Our main data collection methods in this study were semi-structured interviews and document analysis. We interviewed fifteen librarians and five experts from eight libraries of vocational and higher education institutions in Estonia. The experts were persons with library and information science background and with thorough understanding and extensive expertise in the field of information literacy education.

Documentary information is relevant to every case study topic and we used it in this research "to corroborate and augment evidence from other sources" [38, p. 87]. The range of documents we collected in this case study included the following: organizational strategy documents and any other official or unofficial documents related to

information literacy available in the organizational homepages on the web or in case study institutions; library guides; booklets; and resource packs related to information literacy training. Document analysis proved to be a useful method that provided us with additional background information about case study institutions and helped us to compare interview data with information contained in documents.

We collected the data from March to June 2014 and used a content analysis method in data analysis.

4 Results and Discussion

The concept of information literacy was central for this study and therefore it was important that we examine how study participants perceived and understood this central concept. The interview results revealed that, while interviewed librarians preferred different definitions of information literacy, the most favoured definitions originated from the American Library Association (ALA) [46] and the Chartered Institute of Library and Information Professionals (CILIP) [47].

The results of the study indicated that librarians assessed their information literacy on the level of good. In order to facilitate the development of information literacy of the library user librarians used group and individual training, consultations, and developed instructional materials. The integration of information literacy in the curriculum proved to be insufficient and difficult. However, the positive attitude of academic staff towards information literacy was mentioned by several interviewees. The obstacle was a lack of marketing expertise among librarians: the librarians felt that they are not able to promote information literacy successfully and therefore the students and academics do not recognize the need for information literacy training. It was also found that there is no uniform standard to harmonize information literacy training for vocational and higher education students.

In order to carry out training for library users on information literacy the following knowledge and skills were highlighted: pedagogical and andragogical knowledge and skills, including teaching skills; knowledge on different teaching methods and training structure; presentation skills; proficiency on information technology; extensive and deep knowledge of the learning domain; knowledge of various sources of information, skills of foreign languages; knowledge of marketing and study systems; interpersonal skills; critical thinking skills; knowledge and understanding of different target groups; professional expertise in information science; ability to cooperate with faculties; knowledge on the web-based and e-learning environment; academic literacy; counselling skills; and possession of the terminology of the taught specialties. They also added the knowledge on copyright.

The interviewees also indicated the knowledge and skills that are needed for the development of information literacy related instructional materials for library users: good foreign languages and Estonian language skills, knowledge of digital environments and knowledge domains, professional expertise in information science, good knowledge of different databases, andragogical knowledge and skills, knowledge of library classification and systems as well on target groups.

The study results revealed that personal characteristics and attitudes of librarians were also important: for example, openness, learner-centred attitude, patience, self-confidence, friendliness and kindness, motivation, sense of humour, and curiosity.

The interviewees found that pedagogical and andragogical competencies and marketing are the areas that needed further enhancement.

The main opportunities to improve the knowledge and skills were various training courses, self-study, and support of colleagues. It was also noted that the training provided sometimes little new information and was not always need driven.

The study participants expressed the view that all librarians and information professionals must be able to advise users individually to facilitate their information literacy but courses and lectures for a group of students or library users should not be required from all; these require special knowledge and skills as well as personal qualities and attitudes that all librarians do not have. The development of such skills, however, requires very high motivation and not all people can be good presenters and teachers.

This study confirmed several previous findings. For example, integration of information literacy in the curriculum is insufficient and difficult [28, 33]. The teaching role of librarian demands sound pedagogical knowledge, advanced teaching skills, an ability to develop and deliver effective learning experiences, and deep knowledge of specific subject fields [27, 28, 33]. Similar to Virkus [33], our research results indicated the positive attitude of academic staff towards information literacy and the view that the information literacy instructions should not be required from all librarians.

On the basis of this study we made the following suggestions for vocational schools, applied higher education institutions, and universities in Estonia: (a) professional training institutions should explore more carefully the training needs of library and information professionals in order to offer need-based training; (b) library and information science schools should include relevant pedagogical knowledge and skills into the curricula in order to prepare future librarians with relevant competencies to facilitate the information literacy of students and library users; (c) the library and information professionals should express their training needs more explicitly to the training providers; (d) librarians of the investigated institutions should collaborate with their organization's marketing and communications department in order to get more visibility and promote information literacy to the relevant target groups; (e) librarians should continue to enhance cooperation with faculties, and (f) the library management should explain the importance of the integration of information literacy into the curriculum and the benefits of information literacy in learning and teaching to the top management of the institution.

5 Conclusions

Our study results revealed that librarians preferred different definitions of information literacy but the most favored definitions originated from the ALA and the CILIP. Librarians assessed their information literacy on the level of good and the main forms of facilitating the development of information literacy of the library user were group and individual training, consultations, and the development of instructional

materials. Although academics were positive towards information literacy, its integration in the curriculum proved to be insufficient and difficult.

Librarians found that they needed knowledge and skills in pedagogy and andragogy, instructional design, information technology, foreign languages, marketing, information sources and databases as well as on the learning domains. They also needed social skills and found that personal characteristics and attitudes of librarians were very important in facilitating information literacy.

Librarians improved their information literacy facilitation competencies in various training courses, via self-study, and through the support of colleagues. The study participants expressed the view that all librarians and information professionals must be able to advise users individually to facilitate their information literacy but not librarians should be required to teach courses and lectures for a group of students or library users.

References

1. Bishop, B.W., Cadle, A.W., Grubesic, T.H.: job analyses of emerging information pro fessions: a survey validation of the american library association's map and geospatial information round table (MAGIRT) core competencies to inform geographic information librarianship (GIL) curriculum. Libr. Q. **85**(1), 64–84 (2015)
2. Grealy, D., Greenman, B.A.: Set new standard for academe. Inf. Outlook **2**(8), 7–22 (1998)
3. Giesecke, J., McNeil, B.: Core competencies and the learning organization. Libr. Adm. Manag. **13**(3), 158–166 (1999)
4. McNeil, B., Giesecke, J.: Core competencies for libraries and library staff. In: Avery, E.F., Dahlin, T.C., Carver, D.A. (eds.) Staff Development: a Practical Guide, pp. 49–62. American Library Association, Chicago (2001)
5. Dole, W.V., Hurych, J.M., Liebst, A.: Assessment: a core competency for library leaders. Libr. Adm. Manag. **19**(3), 125–132 (2005)
6. Tanloet, P., Tuamsuk, K.: Core competencies for information professionals of Thai academic libraries in the next decade (A.D. 2010–2019). Int. Inf. Libr. Rev. **43**(3), 122–129 (2011)
7. Soutter, J.L.: Academic librarian competency as defined in the library and information science journal literature of 2001–2005 and 2011. Partnership: Can. J. Libr. Inf. Pract. Res. **8** (1), 1–19 (2013)
8. Immroth, B.: Improving children's services: competencies for librarians serving children in public libraries. Pub. Libr. **28**(3), 166–169 (1989)
9. Levett, J.: Key competencies and public librarians: shaping a new curriculum. APLIS **6**(2), 53–57 (1993)
10. Tan, S., Gorman, G., Singh, D.: Information literacy competencies among school librarians in Malaysia. Libri **62**(1), 98–107 (2012)
11. Lewis, S.: Competencies for health librarians. HLA News **1**, 8–9 (2010)
12. Ullah, M., Anwar, M.: Developing competencies for medical librarians in Pakistan. Health Inf. Libr. J. **30**(1), 59–71 (2013)
13. Lawton, A., Burns, J.: A review of competencies needed for health librarians - a comparison of Irish and international practice. Health Inf. Libr. J. **32**(2), 84–94 (2015)
14. Hazelton, P.A.: Law libraries as special libraries: an educational model. Libr. Trends **42**(2), 319–341 (1993)

15. Todd, K.M.: Competencies of law librarianship: reference, research, and patron services. Leg. Ref. Serv. Q. **26**(1–2), 7–22 (2007)
16. Hartnett, E.: NASIG's core competencies for electronic resources librarians revisited: an analysis of job advertisement trends, 2000–2012. J. Acad. Librarianship **40**(3/4), 247–258 (2014)
17. Saunders, L.: Identifying core reference competencies from an employers' perspective: implications for instruction. Coll. Res. Libr. **73**(4), 390–404 (2012)
18. Saunders, L., et al.: Culture and competencies: a multi-country examination of reference service competencies. Libri: Int. J. Libr. Inf. Serv. **63**(1), 33–46 (2013)
19. Han, M., Hswe, P.: The evolving role of the metadata librarian. Libr. Resour. Tech. Serv. **54** (3), 129–141 (2010)
20. Fisher, W.: Core competencies for the acquisitions librarian. Libr. Collect. Acquis. Tech. Serv. **25**, 179–190 (2001)
21. Leach, M.R.: Collection development competencies for science and technology libraries. Sci. Technol. Libr. **28**(1/2), 11–22 (2008)
22. Cohen, L.: A librarian's 2.0 manifesto (2006). http://liblogs.albany.edu/library20/2006/11/a_librarians_20_manifesto.html
23. Stephens, D., Hamblin, Y.: Employability skills: are UK LIM departments meeting employment needs? The results of a survey of employment agencies identifies gaps in UK LIM curricula in the UK. New Libr. World **107**(224/1225), 218–227 (2006)
24. Peltier-Davis, C.: Web 2.0, library 2.0, library user 2.0, librarian 2.0: innovative services for sustainable libraries. Comput. Libr. **29**(10), 16–21 (2009)
25. Breivik, P.S.: Student Learning in the Information Age. Oryx Press, Phoenix (1998)
26. Doskatsch, I.: Perceptions and perplexities of the faculty-librarian partnership: an Australian perspective. Ref. Serv. Rev. **31**(2), 111–121 (2003)
27. Peacock, J.: Teaching skills for teaching librarians: postcards from the edge of the educational paradigm. In: COMLA Seminar 2000: User Education for User Empowerment. Christchurch 19–20 October 2000. http://eprints.qut.edu.au/720/1/COMLA-2000_Final-paper1.pdf
28. Peacock, J.: Teaching skills for teaching librarians: postcards from the edge of the educational paradigm. Aust. Acad. Res. Libr. **32**(1), 26–40 (2001)
29. Brophy, P.: The Library in the Twenty-First Century: New Services for the Information Age. Library Association Publishing, London (2001)
30. Virkus, S., Metsar, S.: General introduction to the role of the library for university education. Liber. Q. **14**(3/4), 8–16 (2004)
31. Kirk, T.G.: Bibliographic instruction, library education, and the role of the academic librarian. Champaign, Illinois, Illinois University at Urbana-Champaign, Graduate School of Library and Information Science, pp. 97–112 (1995)
32. Bruce, C.: Information literacy programs and research: reflections on 'information literacy programs and research: an international review. Aust. Libr. J. **60**(4), 334–338 (2011)
33. Virkus, S.: Development of information-related competencies in european higher open and distance learning: an exploration of contextual factors, Ph.D. thesis, Manchester Metropolitan University, Manchester (2011)
34. Virkus, S.: Information literacy in Europe: a literature review. Inf. Res. **8**(4), paper no. 159 (2003). http://informationr.net/ir/8-4/paper159.html
35. Asher, C.: Separate but equal: librarians, academics and information literacy. Aust. Acad. Res. Libr. **34**(1), 52–55 (2003)
36. Elmborg, J.K.: Critical information literacy: implications for instructional practice. J. Acad. Librarianship **32**(2), 192–199 (2006)

37. Calzada Prado, J.C., Marzal, M.A.: Library and information professionals as knowledge engagement specialists. theories, competencies and current educational possibilities in accredited graduate programmes. Inf. Res. **18**(3) (2013). http://www.informationr.net/ir/18-3/colis/paperC12.html#.UulE2LRc-f4
38. Yin, R.K.: Case Study Research: Design and Methods, 3rd edn. Sage, London (2003)
39. Creswell, J.W.: Qualitative Inquiry and Research Design: Choosing Among Five Traditions. Sage, Thousand Oaks (1998)
40. Robson, C.: Real World Research: a Resource for Social Scientists and Practitioner-Resea rchers, 2nd edn. Blackwell, Oxford (2002)
41. Denscombe, M.: The Good Research Guide for Small-Scale Research Projects, 2nd edn. Open University Press, Maidenhead (2003)
42. Eisenhardt, K.M.: Building theories from case study research. Acad. Manag. Rev. **14**(4), 522–550 (1989)
43. Stake, R.E.: The Art of Case Study Research. Sage, London (1995)
44. Simons, H.: The paradox of case study. Camb. J. Educ. **26**(2), 225–240 (1996)
45. Herriott, R.E., Firestone, W.A.: Multisite qualitative policy research: optimizing description and generalizability. Educ. Res. **12**, 14–19 (1983)
46. ALA: American Library Association Presidential Committee on Information Literacy. Final Report. American Library Association, Chicago (1989)
47. CILIP: Information Literacy – Definition. http://www.cilip.org.uk/cilip/advocacy-campaigns-awards/advocacy-campaigns/information-literacy/information-literacy