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What is Librarian 2.0 - New competencies or interactive relations? A library professional viewpoint

Abstract

Library 2.0 is a change in the way libraries interact with their users. The technological developments on the Web have had a major influence on these changes. The change also places new requirements on librarians' competencies and skills. This research investigates how librarians themselves see this change in terms of their work identity and working knowledge. The research shows what kinds of qualities and characteristics are expected from a 'Librarian 2.0' according to a group of professional librarians. The results associate 'Librarian 2.0' firmly with the Web, although some of the more traditional characteristics of librarianship have retained their relevance. This research also shows that the change towards a 'Librarian 2.0' can be seen as intimidating by some librarians, a fact that has to be taken into account when libraries develop their future strategies.

Keywords

Librarian 2.0, co-word analysis, competence, librarian, profession

Introduction

The phenomenon called Library 2.0 has been defined as a change in interaction between libraries and library users (Holmberg et al., 2009). According to the definition, the

technological developments in the tools and techniques on the Web have been factors in making the change possible. Library 2.0 also means a change towards an increased use of social media and so-called Web 2.0 tools in libraries. This aspect of the change may be assumed to have a great impact on the skills and experiences required by the librarians. The library profession may be approaching another change, a change towards a revised understanding of the core competencies and qualities of librarianship discussed in this article using the umbrella term 'Librarian 2.0'.

There is a wide repertoire of literature discussing the library profession especially with emphasis on change and how to adjust and develop the profession. There is a constant discussion concerning the required skills of librarians in the future and a focus on professional development for different aspects of librarianship and how this should be managed (Cassner & Adams, 2006). Creating training programs for professional development has also been seen as important (e.g. Kealy, 2009). However, opportunities for professional development are not enough to motivate the staff to develop. The support by the management is important as well as a policy for development and rewards (Chan & Auster, 2003). It is also important to share good practices and to communicate new developments to others. Blogs, for instance, have become more important in providing current and quick communication and knowledge on professional development (Cassner & Adams, 2006). In this paper we discuss the library profession in the age of the social web, what constitutes its core competence and professional identity, and what kinds of strategies can be used to adjust to rapid changes. The study uses the notions of Library 2.0 and Librarian 2.0 among library professionals in Finland as a platform to discuss professional development. A co-word analysis is performed in order to find out how librarians themselves see this change in their professional identity and competence.

Librarians and social media

The concept 'Librarian 2.0' may be seen as an extension of the discussion about Library 2.0. The existence of the concept 'Library 2.0' may be taken as an implication that there has to be a comparable 'second version' of library professionals with corresponding 'second version' qualities. Cullen (2008a), for example, claims that a Librarian 2.0 is foremost communicative and user-oriented. Abram (2008) also states that a Librarian 2.0 must have solid knowledge about user behavior. Various lists of Librarian 2.0's skills and traits can be found in many blogs written by library professionals (Partridge et al., 2010).

A focus group study of Librarian 2.0 characteristics was performed among library and information science professionals in Australia by Partridge et al. (2010). They found out that besides qualifications, certain personal traits are important in library work today and in the future. Importance of skills in the following areas was identified: communication, change management, collaboration, information management, leadership, marketing, project management and community engagement. Further, a Librarian 2.0 should be innovative, adaptable and flexible and an active learner. However, both the researchers and the focus group participants raise concerns about the label Librarian 2.0 as this label was believed to draw too much focus to Web 2.0 tools, relegating important issues of participation to the background (Partridge et al. 2010).

Most research articles do not mention the concept Librarian 2.0. They have instead chosen to focus on librarians' competences, especially in using social media. Chawner (2008) has categorized librarians into four roles based on their use of social web technologies. These roles are: content consumer (passive), content commenter (reactive), content creator (proactive) and content collector (current awareness). The librarians in her research were

more comfortable in the role of content consumer and collector than in the proactive and reactive roles. Stephens (2007) created a model of the key skills of a pragmatic blogging librarian. The skills listed by Stephens (2007) are monitoring, gathering, reflecting, sharing, commenting and creating communities. Research by Aharony (2009) also shows that the use of social web technologies among librarians is connected to personal characteristics. Traits that benefit social web use are extroversion, coping with change and empowerment. Computer skills and motivation also play an important role in adopting the technologies.

The explicit and implicit understanding of the concept Librarian 2.0 is deeply rooted in the notion of social media and its use, but the literature also reflects concerns that are based on the longer-standing discussion on the changing professional identity and competences of librarians. In the new information world where we all are connected on the Internet and the Internet constitutes an important part of our daily lives, new challenges emerge for the libraries and the library profession. As Cullen (2008b) writes, there is a new logic of service innovation, a new understanding of library services.

In all professions but especially in the library field, professional development is essential where the working environment is rapidly changing due to technological innovations (Chan & Auster, 2003; Cassner & Adams, 2006). Radford (1992) argued even before the emergence of the Web that the traditional positivist view of libraries was obsolete. He refers to Foucault and Eco and reinterprets library as a labyrinth of possibilities instead of an institution leaning on the ideals of neutrality and access to a limited set of alternatives. Although it has not been clear what the libraries' role in the technological development has been since library automation, libraries have developed a presence on the Web which is continuing and developing. Libraries have set up websites, made catalogues available on the Web, developed

reference services via email, created online chat rooms, etc. But changing work practices are not only anchored in technological development, they are also in management techniques, restructuring, downsizing etc. (Cassner & Adams, 2006).

Since the picture of professional identity and development is so multidimensional, we will take a closer look at core competency, professional identity, and different strategies to cope with change.

Competence and professional identity

Competence is something that constitutes the core of a profession. The core has to be defined to make it possible to discuss and describe the changes in the professional field. Competence is a central concept for understanding the preferred qualities of professionals. The notion of competence may be seen as a middle point between purely behaviorist and activist views of human-beings. The typical definitions of the concept refer to abilities to do something or a capacity for carrying out tasks (Hager & Beckett, 1995). Competence is thus a constellation of abilities and/or capacities embodied in successful activity (tasks) and outcomes (do something). Hager and Beckett (1995) thus see competence as a relation between abilities or capabilities and the satisfactory completion of activities. Competence cannot be reduced to lists of tasks or attributes. Hager and Beckett (1995) propose an integrated view of competence that stresses the need to take into account the contexts of activity and actors and perceive competence in a holistic manner.

In the corporate context, the competence perspective has become a major strategic perspective. According to the approach, organisations are seen as repositories of competence. Competence enables an organisation to solve problems and in general, perform better than its competitors. In the corporate context, competence is empathetically a means to attain and

maintain competitive advantage (Foss, 1996) and an asset that may be used as an instrument in strategic management and corporate renewal processes (Meschi & Cremer, 2005). Even if competence is a corporate asset, it is not limited to one organisation. It is a dyad that incorporates both the organisation and its users (Santema & van de Rijt, 2005). Drejer (2002, 104) suggests that in an organisation, competence consists of a systemic relation of four elements: technology, human-beings, organisation and culture. Technology, perceived as physical tools and systems, is typically the most visible part of a competence. In Drejer's model, human-beings are the focal point of competence without which nothing happens. Organisation provides infrastructure for competence while culture is about shared values and norms.

A personal and shared idea of competence is closely intertwined with the shaping of a professional identity, which is an individual identity as well as a collective identity (Kosmala, 2006). It is formed in a social context and is continually shaped by this context (Sevón, 2007; Sundin & Hedman, 2005; Wenger, 1999). The image of librarianship both in popular media and in user-centred library discourse has upheld a hierarchical dualism of librarians as experts and users as needy laypeople (Tuominen, 1997; Radford & Radford, 2001).

The identity of librarians was earlier strongly connected to a specific collection. In the same way libraries often have been reduced to their collections (Pedersen, 2006; Torstensson, 2002). This assumption has left the perception of librarianship somewhat one-sided and the dynamic nature of the profession inherent in daily library activities has been pushed into the background. There have been suggestions that the focus should be put on the library professional's tools as indications of library activities instead of collections (Martell, 2003; Pedersen, 2006). Changes in professional identity seem, however, inevitable. If there are

changes in the context, there is a need for changes in professional identity and, as stated earlier, the increased use of social media is an important technological change. Technological changes have also in the past led to the greatest discussions about professional identity and role of librarians. Much attention was given to this subject in connection with the growing use of the Internet from the mid 1990's to the beginning of the 21st century (Ashcroft, 2004; Baruchson-Arbib & Bronstein, 2002; Fourie, 2004) but the impact of technological changes on librarianship was also considered long before the Internet became a part of everyday life (Olson, 1995). In the 1960s and 70s, the technological revolution strongly affected the basic work in libraries when databases and library systems were developed. Today's technological change affects more different forms of content and the attitudes towards library users. The discussions have broadly been about whether the profession will survive the digital development and if so, which skills are needed. Librarians' relationship to the work they do and how they handle changes in this work is significant for their professional identity (Abbott, 1998; Broady-Preston, 2009).

Abbott (1988) has a classical model of how changes in professional development can be described. First, there is some sort of disturbance in the traditional work, often brought on by a technological development. This is followed by either an internal or external competition for jurisdiction. Finally, a transformation takes place and a new balance is restored.

According to Abbott (1998) the central challenge for librarians is embracing information technology and the groups who use it (Abbott 1998). Professional competence is based on know-how, tacit knowledge and the understanding of work-practice, in other words the ways of being. This means that e.g. technological development brings new practices which affect professional competence (Sandberg & Pinnington 2009).

In the context of Library 2.0 there is a rapid development of new tools which is assumed to affect the library profession as well and the contextual emphasis on professional development is clear. The dual view of competence and identity is also relevant in library context.

Competence is shaped both on an organizational and a societal level. New tools and a higher level of service have led to changes in the library profession both concerning form as well as content. Olander & Berry (1992) have mapped how changes in society (technological and economic) have affected the library services, how the professional role has changed and which skills should be developed. Service skills were underlined by users but not as much by library managers. The importance of keeping traditional library services was also underlined in this study. Olander (2009) continues this line of research where she explores how the professional role has changed and what the expectations of future library skills are among both library managers and library students. The study shows that the expectations correspond quite well. There is a common view that the important characteristics of a librarian are those of being responsible, cooperative, communicative, flexible, and open to new challenges. There were also some characteristics that did not correspond, for example, library students feel that qualities such as being friendly, reliable, and accurate are important while the library managers did not value these qualities equally high. Instead, they valued qualities such as being engaged, and able to cope with stress.

Strategies

Olsson studied how different technological library innovations affected the library profession in Sweden during the 1970s. She mapped the different projects and the debate taking place during that time. There were a number of clashes of opinions about the librarians' role concerning the technological development in libraries (Olsson, 1995). She presents a map of different professional strategies to cope with the major changes and also how different

professional roles emerge in a time of change. There is a dimension of specialists versus generalists on one hand and a dimension of form versus content on the other hand. The strong discourses in the discussion that constitute the basis for the model are those representing documentalists (trained in documentation) and general librarians. Different library cultures also have strongly affected these professional strategies (Olsson, 1995). Olsson's model is further elaborated by Hjørland where he adds some LIS fields (e.g. Business librarian, Information specialist, Domain generalist) to make the model more detailed without having the aim of making it a complete catalogue of LIS aspects in the library profession (Hjørland, 2000). The model illuminates different professional strategies and roles that emerge through different aspects of librarianship. At the same time the distinct roles of the library profession are blurred and, for example, Stover (2004) discusses the notion of non-expertise in the context of librarianship. The idea of non-expertise was earlier used in psychotherapy to underline the importance of human centered values in the encounters between patients and therapists. The increasing complexity of the information landscape and almost unlimited possibilities to access information makes it ever more difficult for librarians to obtain and maintain a position of unquestioned expertise. In a post-modern sense there is a wealth of different kinds of expertise that are equally relevant in the library context. To what extent these kinds of strategies are relevant today, in the context of Library 2.0, will be explored further through the empirical example in the next section.

Material and methods

One hundred librarians and information specialists working at Finnish libraries were asked to answer the question: What is Librarian 2.0? The respondents could write down their answers, list keywords of characteristics or draw what they felt a Librarian 2.0 is and what kind of competencies a Librarian 2.0 should have. All the answers were indexed separately by five

researchers. In the final stage of data preparation authors discussed how they had indexed the results to achieve a consensus and agreement on the keywords for each answer. This procedure minimized the possibility that a single indexer could unintentionally influence the results and guaranteed higher reliability for the study. These keywords were then used in a co-word analysis.

Co-word analysis is a content analysis method (Courtial, 1994; He, 1999) that has previously been used, among other things, to create maps of science (see, for example, Boyack et al., 2005) and to define what Library 2.0 is (Holmberg et al., 2009). With co-word analysis researchers can achieve an in-depth understanding of research material as both the frequency of the keywords and the connections between them are taken into account. The results show not only which keywords have been used most often, but also with which other keywords they have been used. Co-word analysis therefore maps the possible relationships and connections between different keywords. These connections were visualized in a network graph using multi-dimensional scaling (MDS) technique. Multi-dimensional scaling is a frequently used technique to visualize large datasets. By visualizing large datasets the interpretation of the data can be enhanced and patterns that would not have been otherwise possible to discover may emerge. The graph was interpreted and discussed by the authors to discover possible patterns in the graph and to discover the core competencies of a Librarian 2.0 according to the respondents.

Results

The material is indicative of the views that librarians have of their own role, identity and competencies in the 2.0 context and from figure 1 below we can clearly see which competencies and characteristics librarians themselves considered to be the most important

All the keywords that were used more than once are listed in table 1 below. Many of the less frequently used keywords are not considerably different from what could be considered as more traditional competencies of librarians. Keywords such as *professional*, *guide*, *community minded*, *expert*, *curious*, *cooperative* and *information provider* could be seen as representative of the more traditional characteristics of librarians (Brophy 2007, 68-75). Librarians have traditionally been user-oriented professionals and guides to various information resources and this is something that the respondents have indicated that a Librarian 2.0 also should be. A probable reason for the scattering of the traditional aspects of librarianship in the co-word analysis is the formulation of the posed question (“What is Librarian 2.0”). The formulation was likely to guide respondents to focus on differences and change rather than continuity. The total number of different traditional values and competencies in the responses demonstrates their perceived significance.

Table 1. The frequencies of the keywords that were used more than once

Internet competent	27	networking	6	Excited	4
interactive	25	social	6	Courageous	4
user oriented	22	community minded	6	Initiator	3
up-to-date	16	communicative	6	information provider	3
active	15	adaptive	6	Intermediator	3
Internet minded	13	expert	5	Young	3
producer	13	teacher	5	Developer	3
virtual	10	learner	5	new generation	2
open	10	interested	5	User	2
professional	8	innovative	5	content skilled	2

guide	8	curious	5	web service	2
physical	8	forward thinking	4	web user	2
IT skilled	8	participant	4	information seeker	2
multitalent	8	cooperative	4		

It is also interesting to see that not all librarians see the Librarian 2.0 as only challenging but rather quite intimidating. One respondent answered that Librarian 2.0 is stressed and five librarians answered that a Librarian 2.0 must be young or from a rising generation.

Discussion

The results concur with the relative prevalence of views presented in the literature that a new cultural shift leading to a new form of librarianship, a type of a postmodern professional specialism is under way. The analysis highlights the significance of a number of topics discussed in the literature including user (Cullen 2008) and community engagement, importance of personal traits, cooperation and (intellectual) leadership in terms of being up-to-date and competent (Partridge et al. 2010), The cultural shift is anchored in the emergence of the digital information environment and the outspoken need for the development of digital library services. The focus of the change seems not to be, however in a dichotomy of the digital and the analogue, but rather in the new interactive digital order (Joint, 2006) characterised by the notion of Library 2.0.

Technological changes often have created resistance in libraries – the workers or the management may not be interested in new technologies, since learning new methods for work have been seen as challenging (Olsson 1995, 15; Rutherford 2008, 194) as the anxieties shown in some of the respondents highlight. Information technology is still, over a decade

after Abbott (1998) identified it as a central challenge for librarians, a controversial question. At the same time, similarly to the assumptions and findings presented in the earlier literature (e.g. Ashcroft, 2004; Baruchson-Arbib & Bronstein, 2002; Fourie, 2004, Partridge, Lee & Munro 2010), the results show clearly how technology shapes the attitudes of the expected competences of librarians requiring a different mindset of the profession. Core skills of library services and management will continue to evolve in line with what has been the core of the profession (accessing information) but with an engagement to new understandings of information use among a new generation. It is noteworthy that the list of characteristics associated with Librarian 2.0 contains competences both in terms of both abilities and outcomes (as suggested by Hager & Beckett, 1995). It is not, however, altogether clear whether the indicated abilities and outcomes are related, and that the abilities lead to desired outcomes. For instance, being Internet competent is not necessarily related to being Internet minded or vice versa. This possible dichotomy underlines the acknowledged importance to put the energy into professional development in understanding the user rather than getting the user to understand the service (Cullen, 2008a).

The nature of the present study does not allow inferences about the actual competences of the informants to be made, but considering the data gathering method it is probably quite safe to assume that the qualities are more likely to reflect a desired state of competencies and qualities than the actual average competencies of the informants. The references to innovation, courage, being forward thinking and an initiator underline the perceived significance of change and its assumed relation to maintaining a competitive advantage by acquiring new skills (Foss, 1996). The qualities represented by the keywords resemble the qualities listed by Peltier-Davis (2009) and Stephens (2007) The analysis of the keywords suggest that the librarians were clearly emphasizing a need for proactive and reactive centric

roles of social media use. This is, however, in a direct contrast to the findings of Chawner (2008) on the roles preferred by a group of librarians. She found that the librarians tended to be more comfortable with content consumption and collector roles instead of wearing the mantles of proactive or reflective actors.

The mixed expectations can be seen also in this study where professional identity, defined by librarians, seems to have a dual profile when it comes to Librarian 2.0. They are experts on one hand (IT skilled guide, expert, teacher, and internet minded) and learners on the other hand (adaptive learner, curious, open, and interested). Librarian 2.0 is being in a learning process while being an expert. Earlier studies and literature have suggested similar shifts in the profile of librarianship. Specific collections determine Librarianship 2.0 far less than before (cf. Pedersen, 2006; Torstensson, 2002) and the focus is placed more on activities and interaction.

The duality of the profile of the qualities of Librarian 2.0 resembles also the understanding of the notion of competence put forward by Santema and van de Rijt (2005) who perceive it as a quality that incorporates both an organization and its users. In the core of the profession, the communicative skills are underlined through qualities such as being social, good at networking, being active, interactive, and user oriented. These qualities are also defined in Olander's study (2009) where openness, flexibility, and engagement are underlined. The strategies (Olsson, 1995; Hjørland, 2000) to cope with change are more difficult to track from this study. On the scale from specialist to generalist it seems the strategy of the discourse of the Librarian 2.0 is to be a specialist on social web and interactive tools, focused on the form of information rather than the content. At the same time the library profession certainly has a challenge to balance between being a specialist on one hand and a communicative generalist

on the other hand. The paradox of being a specialist and non-specialist (Stover, 2004) is difficult to cope with. However, it seems that today's library professionals are quite talented in combining the traditional roles or strategies built on the core competencies that have been at the center of the library profession for a long time. As the dual profile of Librarian 2.0 shows, there seems to be a certain conviction that it is possible to become a specialist who is ready to admit her non-specialism on the fringes of the core areas of competences. According to Partridge, Lee & Munro (2010), the ability to adjust to rapid change is a key skill for library professionals in the Web 2.0 world.

The results are easy to see as symptomatic of a 'moral panic' (Bennett, 2008) and a sense of inadequacy, but the anxiousness of personal and anticipated competencies can be seen also as a sign of a fundamental shift in the idea of libraries and librarianship. The Radfordian (1992) reinterpretation of the idea of libraries can be seen in the emergence of common characteristics assumed of librarians and library users. The lack of clear patterns in the roles and characteristics may be seen similarly as a sign of the labyrinth-like idea of what a library is and what librarians should do. Transience is not a problem, but rather a goal.

Conclusions

The diversity of the described qualities of librarians and library users may be seen as an indication of the diversification and assimilation of traditional forms of expertise into contextual expertise, viewpoints and participation. Therefore, following Stover (2004), the Librarian 2.0 is not much in certain qualities, but rather in their convergence and complexity. The Library 2.0 discourse has been explicit about a demand for new competences especially in the first sense as abilities or capacities to act in the context of digital and social media.

There has been, however, considerably less discussion about desired practical outcomes. From the point of view of competence, the approach may be argued to be biased towards the facilitating role of technical and social skills without in-depth consideration of what is the supposed outcome of Librarianship 2.0.

In conclusion, the results of this research showed that librarians' ideas of their desirable future skills relate to operating and navigating on the Internet, and they should be open for interaction with the users on the Internet. But at the same time the results show that the notion of Librarian 2.0 is firmly anchored in the traditional core values and competences of librarianship.

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