

Constructing librarians' information literacy expertise in the domain of nursing

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Constructing librarians' information literacy expertise in the domain of nursing

Abstract

This article investigates negotiations of librarians' expertise in relation to information

literacy at the micro-level, specifically in the domain of nursing education. A

qualitative empirical framework is employed. The study draws on 18 semi-structured

interviews, 16 with Swedish nursing students, one with a librarian and one with a

nursing professor. Three themes on librarians' expertise emerge in the findings:

technical-administrative, information searching, and source evaluation expertise. The

themes have different foci which are shown to be relatively independent, or dependent

on the domain of nursing. The results indicate that it is important for librarians to

navigate between two different strands of perceiving information literacy practices,

either as generic or as embedded.

Key words: information literacy, librarianship, expertise, nursing

Introduction¹

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Librarians have an important role to play in supporting students' development of information literacy; but what is that role, or rather, what are these roles? Authors within the field of information literacy almost without exception argue the importance of collaboration between librarians and teachers. At the same time, it is also maintained that librarians have no monopoly on questions concerning information literacy. Despite this apparent homogeneity in the research field, there is a wide difference in approaches towards the initial question. The scholarly discussion concerning practices in information literacy has revealed divergent conceptions of information literacy and their groundings in different meta-theoretical positions (Tuominen, Savolainen & Talja, 2005). The difference in approaches could be described in terms of a continuum that reaches from regarding information literacy as primarily generic skills to regarding information literacy as embedded in the courses and programmes of various subject domains (e.g. Pilerot, 2006).

The objective of the present article is to contribute to an in-depth understanding of librarians' expertise in relation to information literacy practices. The appropriation of information literacy is here regarded as a process of being empowered in relation to various information practices within certain domains. Such an analytical definition of information literacy should be related to empirical definitions which differ between and within domains. Thus, an understanding of general phenomena such as information literacy can only become possible when investigated in the context of particular practices. Accordingly, it is the purpose of the present study to investigate negotiations of librarians' expertise in relation to information literacy at the microlevel, and more specifically in the domain of nursing.

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Librarians' activities in fostering information literacy among nursing students and nurses have been discussed earlier in LIS (e.g. Dorner, Taylor & Hodson-Carlton, 2001; Durando & Oakley, 2005; Gannon-Leary, Wakeham & Walton, 2003). The literature argues for cooperation between nursing faculty and librarians and different information literacy programs have been suggested. One reason for this argumentation lies with the importance that is assigned to evidence-based practice within nursing (e.g. Gannon-Leary et al., 2006; Sundin, 2003). Among other things, the evidence-based practice movement states that professional practice should be firmly based on research as presented in the literature. Thus, the ability to read research and to use bibliographical databases and other tools for finding information becomes relevant.

The purpose of the article is fulfilled through the empirical study of the different meanings 16 Swedish nursing students, a librarian and a nursing professor attribute to the expertise of librarians in relation to information literacy. Rich empirical interview descriptions are combined with theoretical reflections. Nursing is a relatively young academic discipline. This means it is possible to discuss the position of librarians in ways that might not be feasible for more established academic disciplines.

Furthermore, nursing as a discipline has to be related to nursing as a professional practice, where nurses work together with other professionals at hospitals and other health care institutions. The theoretical concepts of community of justification and cognitive authority, introduced in the next section, guide the analysis. These two concepts focus on the position of librarians as a part of the community they support, in this case, nursing.

The next section addresses the theoretical points of departure and presents earlier literature on information literacy. Subsequently, the empirical framework is discussed, followed by an introduction of the empirical case. The findings are presented through quotations from the interviews categorised in three themes. Finally, the results are discussed along with some tentative conclusions concerning the information literacy practices of librarians.

On librarians' expertise and information literacy

In the present article, the term *expertise* is defined as being attributed to a profession or a professional. Accordingly, professional expertise is not seen as stable and fixed, but as always negotiated and in a state of continuous movement and change (Sundin, forthcoming). Expertise could be related to the concept of *cognitive authority* as it is discussed by Patrick Wilson in his 1983 book *Second-Hand Knowledge*.² According to Wilson, both people and texts may be attributed the status of cognitive authority by peoples' talk, writing and other linguistic actions. In our context, Wilson's analysis of cognitive authority is especially interesting when he discusses the role of librarians in general and, as Wilson (1983, p.188f) describes it, librarians working in a "didactic library" in particular. The cognitive authority attributed to a professional, an article, a book or a website has no essential and objective quality as such; rather, the central question is how value or reputation are negotiated. Different knowledge claims are given different authority in different domains.

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² Patrick Wilson makes a distinction between an expert and a cognitive authority: "Having authority is thus different from being an expert, for one can be an expert even though no one else realizes or recognizes that one is, and even if one were the last person on earth" (p. 13f). The present article makes no distinction between expertise and cognitive authority. Instead, both authority and expertise is regarded as socially formed.

In the present article, the neo-pragmatist concept of *community of justification* is drawn on to illustrate how different tools are used within a particular community, such as a profession and the training for that profession (Sundin & Johannisson, 2005a; Johannisson & Sundin, 2007). Accordingly, a student of nursing makes use of the tools at hand in the community of justification within which the student acts. These tools can be exemplified by librarians and information artefacts of various kinds, but also by the set of rules that prescribe how these librarians and artefacts 'should' be dealt with. The set of rules of how to relate – intellectually and physically - to librarians, articles and databases construct individuals as 'users' within a certain community of justification. An academic discipline 'disciplines' its members to behave in certain ways even though the individual always has the potential to act differently. In relation to the above discussion we maintain that librarians' expertise is negotiated within and between different communities of justification. If regarded as being close to being a member of the users' community of justification the librarians' expertise in relation to information literacy can also encompass assessment of cognitive authorities within the particular community.

In other words, the theoretical starting point is the requirement that the librarian has a thorough understanding, not only of the physical tools, but also of the intangible set of rules of the community of justification in relation to which she or he works. The librarian should not, therefore, take on the role as the evaluator of objective knowledge but, as Michelle Holschuh Simmons (2005) puts it, mediate the discourse(s) of the discipline within which the students are acting. Holschuh Simmons (2005, p.305) maintains that: "In order for undergraduate students to be able to locate, understand, evaluate, and use information, they need to recognize the disciplinary

epistemological conventions that shape knowledge". Returning to Patrick Wilson, the librarian should not only assist the user by seeking information, but also help determine the cognitive authority of that information:

This may not be very comforting to librarians, who like to think themselves professionals with special skills at finding information. But if the special skills do not include evaluating claims to cognitive authority, it is not clear why we should recognize them as able to find information at all, except in the sense of finding out what is said in various texts. (Wilson, 1983, p. 186)

Therefore, Wilson recommends librarians to "/.../ follow the judgement of the group or institution to which the library is an adjunct /.../" (p. 189). In the present article, this is regarded as a meta-awareness of the epistemology at play, a kind of 'epistemological opportunism' if you like, in relation to the community of justification of the users. Such a perspective, in accordance with Holschuh Simmons, promotes the idea that librarians should be able to mediate an understanding of how "discourses differ across disciplines" (2005, p. 298). Accordingly, the didactic librarian is given a special position both within and between different communities of justification and the set of rules regarding information practices that are inherent in the communities.

Before introducing the empirical framework of the study, it is necessary to present a brief overview of empirically-based information literacy research with a focus on the role of librarians. Previous research has either taken the perspective of the <u>educators</u> (e.g. Limberg & Folkesson, 2006; Limberg & Sundin, 2006; Moore, 2000; Sundin,

Borttaget: pedagogues

forthcoming) or the perspective of the users (e.g. Bruce, 1997; Kuhlthau, 2004; Limberg, 1999; Lloyd, 2007). The first perspective has deepened our understanding of the ways in which librarians and teachers teach information literacy, what these ways signify and the problems librarians and teachers encounter. The second perspective has researched information literacy from the other angle, i.e. ways of becoming what is termed 'information literate' have been investigated from the perspective of the users.

Borttaget: pedagogues

Findings from the perspective of the <u>educators</u> indicate, among other things, that school librarians promote information seeking practices via books rather than web searching (e.g. Limberg & Folkesson, 2006) and adhere to the idea that information seeking should be conducted according to a specific order between different genres of information sources (Limberg & Folkesson, 2006; Limberg & Sundin, 2006). In a study of academic libraries' web based tutorials of information literacy, Sundin (forthcoming) shows how information literacy education is anchored in different theoretical views of information seeking which promote different approaches to the teaching of information literacy.

Kuhlthau's studies of the information seeking process as experienced by users constitute an example of users' views of the role of librarians. In her series of studies Kuhlthau (2004, p. 107-109) highlights that users of libraries attribute an extremely limited role to formal mediators, such as librarians. According to Kuhlthau's findings, students regard the library as "a self-service operation with little provision for professional / client interaction" (2004, p. 108). The role actually attributed to librarians was exclusively source oriented and described as "directing them to sources

that they had difficulty locating on their own" (p. 109). In her study of senior high-school students' information seeking and learning Limberg (1998, p. 111-113) reports similar findings on the role of the high-school librarian mainly as a locator of sources and to some extent as an assistant in online searching.

Drawing on her findings, Kuhlthau (2004, p. 114-126) suggests an expanded role for librarians related to her process model, where the interaction between user and librarian is strengthened and adapted to the various stages of the information seeking process. Focussing on the educational role of librarians Kuhlthau describes five levels, from the role of organizer of information to the role of counsellor, implying processual instruction on identifying and interpreting information throughout the students' information seeking and learning process. In this way Kuhlthau contributes to the discussion of a more deliberate pedagogical role for librarians and more purposeful intervention in users' information seeking processes.

An important point to note in the earlier information literacy research presented above is that despite different theoretical departures, information literacy should not be seen as isolated and out of context. Instead, information literacy practices and the teaching of these practices are given different meanings in different domains and by different groups. This perspective on information literacy should be related to an increasing awareness within library and information science of the sociocultural perspectives of information seeking and information literacy practices (e.g. Lloyd, 2007; Sundin, forthcoming; Sundin & Johannisson, 2005b; Talja, 2005; Tuominen, Savolainen & Talja, 2005).

Empirical framework

A qualitative empirical framework has been used in which in-depth interviews formed the basis for data collection. The interview material analysed constitutes one theme in the project Information Seeking in the Transition from Educational to Occupational Practice. In this project interviews have been undertaken with students of the professionally oriented disciplines of nursing and librarianship towards the end of their education and at the beginning of their occupational careers concerning their information practices.

The empirical material of the present paper consists of 16 interviews with undergraduate nursing students undertaken during the late spring of 2005. The age of the students varied from 21 to 57 with a median age of 30. There were 14 female and two male nursing students. The students' main teacher librarian was also interviewed and one interview was conducted with the nursing professor responsible for the assignment course. The librarian was 30 at the time of the interview. She had been substituting as a teaching librarian, primarily, for a year, with a particular responsibility for the nursing faculty. The nursing professor was 55 at the time of the interview and had many years experience in supervision, in method and theory courses as well as in the examination of dissertations. These last two interviews helped to balance the student perspective of the study. The students were all in the same Swedish nursing program and were members of the same class. The interviews were conducted at the end of their fifth semester of six, and at a point when they were undertaking a written assignment in connection with the Bachelor degree. They were at a stage when they had to choose a focus for their work (see Kuhlthau, 2004).

In order to select participants, the study was introduced to the students at a lecture on user education held by the librarian. The students were asked to participate on a voluntary basis and, of approximately 60 nursing students, 37 students showed their interest by writing their name on a list. The order in which the recruited students were interviewed was randomized. After 16 interviews it was estimated that we had arrived at saturation level and that there was no need for further interviews. Each interview took around 35-50 minutes and was conducted at the participants' university. The interviews were semi-structured and a written interview guide was used as a checklist. The empirical material of the present article is based mainly on participant experiences of librarians throughout their education and particularly their experiences of user education. All interviews were recorded and transcribed.

The analysis was carried out dialectically between the theoretical points of departure and the empirical material. The analytical focal point was on the different ways in which the expertise of librarians, in relation to information literacy, was expressed by the participants. In other words, it was not the individual participants and their statements that were central but a discourse-oriented level which focuses on information seeking practices, seen as a linguistically mediated action (Johannisson & Sundin, 2007). The ATLAS.ti software was used for archiving the transcripts and for the creation of empirically grounded themes. The analysis was conducted through a comparison of differences and similarities among interview statements. On the basis of the statements empirically based themes were created. In the article, each theme is illustrated through commented interview extracts, translated from Swedish to English. The findings are introduced with a description of the context of nursing.

Introducing the case

The training to become a nurse in Sweden is an example of a formerly vocational education that has become increasingly more academic. This development in Sweden reflects developments in the Anglo-American world in general even if academization in Sweden had a later start than in, for example, the United States. It can, in fact, be argued that nursing journals, books, literature databases and other tangible manifestations of nursing information have been used to foster the professional project of nursing. That is, nursing books, scientific articles, web-sites, databases, etc. do not only play a rational role in problem solving, learning and knowledge development; they also play a symbolic role in promoting the professional interests of nursing seen as a scientifically based profession. (Sundin, 2002; 2003).

In relation to the symbolic role of nursing information artefacts, the close but sometimes intricate relation to medicine needs to be mentioned. When promoting the professional project of nursing it is crucial that nursing is distinct from the medical profession. Medicine, which is a traditional and powerful academic discipline that nursing always has to relate to is, simplified, based on a natural science oriented epistemology, while nursing, in its academic setting, builds to a higher degree upon a post-positivistic epistemology. The latter epistemology promotes qualitative and interpretative research rather than quantitative and predictive research (Willman & Stoltz, 2002). (Sundin, 2002; 2003)

At the time of the interviews, the librarian had given a preparatory lecture to the students during a theory and method course. This two-hour lecture was followed by a

two-hour workshop in which students attempted to seek information for their assignment with the help of the librarian. The lecture and its related workshop were the final formal information literacy activities of three organised by the library for the nursing students. During the first term, library resources were introduced to the students. The second activity took place during the fourth term at a time when the students were expected to find scientific nursing articles. None of the three exercises were compulsory, yet participation was strongly advised by the nursing professors.

In line with earlier research on nursing students' information literacy, the significance of information seeking and user education was emphasised in the interviews by all participants. The interviewed librarian expresses this in the following way: "/.../ the department is really fantastic because they make it really clear to the students that information seeking is a very important part, 'Go there and listen to them, you'll learn a lot of useful stuff". In the two-hour preparatory lecture by the librarian, one of the slides had a headline with the question "Why information seeking?" The answer was given on the same slide: "Use research to promote the nursing profession. Read, use and spread research". This clearly illustrates the strong symbolic role information seeking holds in the professional project of nursing, a point made above.

The relation between the nursing department and the library is, according to the participating librarian, better than in any other discipline at the university in question. Relatedly, the interviewed nursing professor said that the nursing students should: "/.../ acquire a competence which as qualified nurses they can use to seek literature, put forward evidence, so to speak, for forming care treatment, for creating good care on reliable grounds based on the literature". The interviewed nursing students agree in

general with this view on the nursing department's position, as one of the informants states:

/.../ there's been an awful lot of searching for new research and all that bit (Gerd).

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Again, professional information has an important symbolic role for the community of justification of nursing and, furthermore, the ability to use the tools for dealing with professional information is emphasised by all parts.

An extensive written assignment, a dissertation, in connection with the Bachelor degree is a compulsory component of the nursing program in question. The dissertation course was stretched over two semesters and was preceded by the theory and method course. In their dissertation work, the students were not allowed to carry out an empirical study. Instead, their dissertation was based on different kinds of literature syntheses.

Attributions of librarians' expertise

The way the participating nursing students, as well as the librarian and the nursing professor, attribute expertise to librarians in relation to information literacy is presented through three empirically grounded themes: technical-administrative expertise, information searching expertise and source evaluation expertise. However, these themes are not self-contained entities and may overlap to some extent.

Technical-Administrative Expertise

One aspect of librarians' expertise in relation to information literacy is categorised as technical-administrative expertise. To be able to help students with administrative procedures is expressed in the following statement in which the student refers to how she experiences the support she got from librarians:

You know, help with practical things like ordering articles. (Josephine)

The support librarians offer users when they are trying to become acquainted with the different functions in databases can be seen, primarily, as a technical skill and it is related to administrative expertise. One participant amongst many referred to how she got help from the librarian when using the nursing research database *CINAHL*:

/.../ and then, how you save searches and things like that, we didn't know that at first, that you could do that, it's not something you think about, so every time we did a search we started from zero, just about. And then she showed us how to do it so it made things much easier. (Olivia)

Despite its seemingly generic character, the significance of a technical-administrative expertise could, to some extent, be seen as formed within this particular community of justification. Databases and peer-reviewed articles figure prominently within nursing research and the ability to find the right articles and to use the databases properly is emphasised.

A technical-administrative expertise is also related to the assessment of cognitive authority. By evaluating authority the librarians helped the participants to distinguish

between peer-reviewed articles and other articles, a distinction which is important in their community of justification:

/.../ take Medline, for example, how you find a peer-reviewed article or how you find everything from '97 onwards and sometimes you just can't find all the buttons you're supposed to press. (Maria)

Distinguishing between a peer-review journal and other journals is here referred to as a matter of finding the right button to press. Other ways of making this distinction include using a list of nursing journals provided by the library in which the peer-reviewed articles are clearly indicated, and being shown which database field to look for:

Yes, well, things like how you find out if a journal is scientific or not, it was really useful that she showed us because we'd been searching for ages before we found out how you go about checking if the journal was scientific and we had to determine it ourselves and that ... well, it takes forever, sitting there and ... even if it's usually just to leaf through it, it's hard work. (Olivia)

This is an interesting aspect of identifying the librarian as a supporting tool for assessing the cognitive authority of a particular article. Within the community of justification of nursing the distinction between 'scientific' and 'non-scientific' material is a central aspect of information seeking practices. This suggests that for the nursing student the ability to restrict searching to peer-reviewed articles is highly relevant.

A further expression of technical-administrative expertise emerges in the technical solutions offered to participants when they attempted to judge the cognitive authority of an article, for example, in offering tools for counting impact factors. The interviewed librarian refers to one occasion when she helped one of the participating nursing students to compare the impact factors of two different nursing journals:

I had two students a while ago who wanted to check ... compare two different health science jour ... or nursing [laugh] scientific journals and do something, so they wanted to know what they had...and then I said ... then they said: "We want two equally good ..." or something like that, and then I helped the students to use Impact Factor on just those two ... (Librarian)

The technical-administrative expertise of librarians is domain independent in the sense that librarians do not have to be knowledgeable in nursing research per se. At the same time, the importance for the students to be able to distinguish between peer-reviewed articles and other types of articles is formed within their community of justification. The librarian acts therefore as a 'time-share' member of this community. By using technical tools the librarian can empower the users in evaluating the cognitive authority of articles.

Information Searching Expertise

The librarian seen as an expert searcher and locator of information is another expertise that emerges in the empirical material. In order to become an information searching expert, the librarian needs to be able to handle the information systems in

which or with which she works so that a particular document can be found. In relation to the technical-administrative expertise, information searching expertise is less 'technical' and more oriented towards searching strategies.

The participants make use of librarians in a more 'traditional' way by simply asking them to find books in the library or articles in a database, as the example below demonstrates:

/.../ when we get an assignment they say, well, yes there are articles about this. But then we haven't ...then we haven't known how to find articles, we haven't had a clue, so then you have to go to the librarian and say; "help us".

(Caroline)

The issue in the above account does not concern learning how to find the material by themselves; i.e. developing what many librarians commonly designate as information literacy, but rather of localising documents by directly asking the librarian where a particular document can be found. The distinction between finding documents and teaching the students to find documents on their own is the subject of an ongoing discussion among librarians:

... it's something we discuss a lot at work; "What is it we really do? Do we give them the right answer or provide them with tools for finding it themselves? It's the last mentioned we prefer to work with. It's pointless to give them a book and say; "This is the book you should use" or something like

that. It's ...that's something the students should determine for themselves.
(Librarian)

The didactic role of librarians here concerns empowering students by teaching them to navigate in various information places within different communities. This includes instructions for how to use the library, how to use the web and how to use databases.

The importance of helping users to find their way in the library is something the participants highlight:

Yes, it's been important to me and they've been really good wherever I've been; here, or at the hospital. And up there, I think they've been really helpful and helped me and showed me where to look in the library – I know how to do it today, I didn't before. (Agneta)

The database is probably regarded by the participants as the most important tool with which to conduct information searching. One of the participants explains the way she valued what she had learned from the librarian when she tried to find keywords:

Because it's very easy to get stuck. You think...you fool yourself and think that you're somehow using new keywords and you put them together so nicely but you always retrieve the same articles. Somehow, you fool yourself there. I don't know what happens really, but it's... (Gerd)

All of the participants had also been trained in how to use a thesaurus. The fact that such emphasis has been put on different behavioural skills in relation to databases, such as Boolean logic and the use of thesaurus, could be seen in the light of the importance that is given to scientific articles within the community of justification. Research articles are given a high cognitive authority and it is likely that less emphasis is put on searching for peer-reviewed articles in some other disciplines. The librarian states:

Yes, it's...you know, it's a lot, unfortunately [laugh] ...they can be very focused on database searching. Well, it is, isn't it? That's the information they want, because it's what they should have. They have to have scientific articles, don't they? (Librarian)

In the present study it has been particularly interesting to explore the local negotiations where the border between the librarian's responsibility and the discipline of nursing is established:

Well, I suppose they can help me to find the appropriate database for the subject I'm looking for but I don't think they're so concerned about nursing science itself and its keywords (Maria)

The participant in the above quotation draws the line at suggesting databases suitable for the discipline, and implies that a closer knowledge of the discipline lies outside the librarian's realm. To mediate information searching skills to students does not

necessarily include an understanding of the discipline as such, but rather the proper behaviour in information systems.

However, the interviewed nursing professor draws the line between the responsibility of librarians and the discipline of nursing in a way that attributes librarians with a high degree of knowledge of the discipline when supporting information searching in databases:

They help you to ... with the system ...to find the keywords, that is, for the students ... it's the same thing for me when I'm doing my thing and my research and for the students when they are about to start with their essays. It's hard to say what it is exactly, what keywords fit. In our area there are so many soft terms that are difficult to get a grip on. (Nursing professor)

The nursing professor refers to the important role qualitative research is given at the nursing department. The focus accorded to searching information in databases must be understood in relation to the cognitive authority that formal nursing information, in general, and research articles, in particular, is given within the community of justification.

Interestingly, the view of users' information seeking as a process of creating meaning which encourages the user to think about information seeking as a process is hardly present. When taking a look at the teaching material used by the librarian it is difficult to identify the process approach to information seeking as it is described in the LIS literature, for example by Carol Kuhlthau (2004). On the other hand, the interviewed

librarian also wanted to "Be an emotional support for frustrated students" (Librarian) and an emotional support was also attributed by a few of the participants:

They [librarians] help you when you get frustrated and can't find what you're looking for, they either find it for you or tell you that it doesn't exist... they sort of make the frustration disappear. (Niklas)

According to the student, the librarian gives emotional support by either finding articles or, perhaps even more importantly, relieving the students by telling them that no article exists on the topic in question.

In summary, information seeking expertise concerns how to find information and documents in different information systems. This expertise combines the more 'traditional' expertise of 'knowing the library' with an expertise that also requires an understanding of other information systems, such as bibliographical databases, and how these can be used by the means of Boolean logic, thesaurus etc.

Source Evaluation Expertise

Librarians are also attributed an ability to support the evaluation of sources. Important traits in this aspect of expertise are to be able to critically evaluate information artefacts, to be able to distinguish between different genres in various communities of justification and to understand the ways in which information is communicated within the community.

One recurring trait that emerged in the interviews was the librarians' ability to distinguish scientific information from other information on the web:

/.../ well of course, before, when you searched the Internet and that ... you learn about information seeking for quality

Interviewer: Yes, how do you mean?

Well, that what you find is on a high enough level for this type of assignment.

Before, maybe you just took what you found on the Internet; "Oh, this must be true" even though you had no evidence that it was. (Johanna)

The above account does not relate information literacy to any particular expertise in nursing. Instead, the ability to distinguish between scientific knowledge and other knowledge forms could be regarded as a generic skill. In a related manner the nursing professor suggests developing collaboration between the department of nursing and the library in supporting the students' understanding of different genres:

/.../ searching with Google or searching a scientific database, what are the differences? And I mean that ... I think that ... I really think that the collaboration between us could be developed. (Nursing professor)

The ability to make a distinction between scientific information and other genres is at the heart of the participants' information seeking practices and is also attributed to the expertise of librarians. This ability was also touched upon in the two earlier themes presented here, but in a different way.

The question of where to draw the line between the librarian's responsibility in relation to the discipline of nursing and other disciplines is crucial when discussing source evaluation expertise in the community of justification in question. The interviewed students were not sure of the extent of librarians' source evaluation expertise:

Yes, but then I'm not sure how competent they [librarians] are when it comes to specific subject knowledge, you know, about healthcare and such. (Karl)

The librarians' ability to participate in the negotiation of cognitive authority in the community of justification of nursing is questioned here. The librarian discusses this borderline in relation to the choice of keywords to be used in database searching and in relation to the evaluation of particular articles in the following way:

My job is to try to guide them, at least to the right source, that is, the right info, ...like where ... "is CINAHL a good database or is Medline better?" I can give them little tips, you know. And if we're discussing subject headings you can, well, mention something like; "add on qualitative aspects if it's a qualitative study you want ..." I mean you can discuss things like that but actually determining /.../ that "Is this a good article or not?" Then I can say "Okay, that's a scientific journal you're looking at, it's called Journal of Advanced Nursing or something like that. That's a good sign, it's like ... and it's got a scientific layout, there's an introduction and method and that sort of thing." But the actual contents, that's up to the students. (Librarian)

Especially in the last sentence the librarian clearly states that it is not the responsibility of the librarian to help the student with the content of articles, that is, the librarian does not want to make a distinction between nursing articles and articles from other disciplines. The nursing professor argues in a similar way for setting the limits of the librarian's activities before going into the content of the article:

/.../ well, the content of the product and the methodological approach, for example, a phenomenological analysis or something like that, whatever it is, I don't think the librarian can go in there, that's our bit. But it's ...what the librarian can help out with, that's the whole flood of different databases and different search paths. (Nursing professor)

But the limit is not obvious and some students draw the line differently:

I mean, you can sit there by yourself and look and that, but you get...there's a lot, you know, and there are so many ways you can search and well, just picking out something and it has to be nursing scientific and where it is and that kind of thing. So they can help you with that and that's really good.

(Birgitta)

The student talks about how the librarian can help her to find *nursing* articles and touches upon the important distinction between nursing science and other disciplines. Thus, the librarian is here attributed with an expertise that also includes aspects of the evaluation of information, that is, its cognitive authority.

The source evaluation expertise puts the spotlight on the librarian as mediator of the set of rules regarding information and information seeking within the community of justification. The expertise often requires some kind of contextual understanding; the question remains where to draw the line for that understanding. It is evident from the empirical material that this line is not a stable one.

Concluding remarks

The objective of a didactic librarian who participates in the development of users' information literacy, is to empower their users. But librarians' approaches in this area diverge significantly (Limberg & Sundin, 2006; Sundin, forthcoming). In the analysis, three themes of librarians' expertise in relation to information literacy have been constructed: technical-administrative expertise, information searching expertise and source evaluation expertise. These three facets of librarians' information literacy expertise are more or less domain dependent or independent and with different foci. The task of creating empowered users cannot be simply defined, but the task itself emerges more clearly when viewed from the perspective of communities of justification. In nursing, it may be assumed, that the content of user education differs from that of the medical or a humanistic disciplines, to take two examples.

Attributions of librarians' expertise are therefore likely to vary from discipline to discipline.

Two important demarcation lines can be made out in the empirical material. The first is drawn between 'scientific' information artefacts and 'non-scientific' information artefacts. To be able to navigate between these two strands concerns issues of contextual understanding. At the same time, the empirical material provides evidence

that being able to make this distinction is to some extent seen as a generic expertise. For the young discipline of nursing the distinction between science and non-science is crucial. The demarcation line was often regarded as difficult to draw by the students participating in the present study, yet, interestingly, it is at the same time perceived as existing objectively. The participants frequently describe the librarian as having an expertise which encompasses the ability to navigate this border region. The second_line <u>less visible in the material</u> is drawn between nursing research and other disciplines. The importance of this distinction can be understood as a strategy for the nursing science to emancipate itself from the discipline of medicine (Sundin 2002; 2003). This distinction seems to be more difficult to handle, for both the librarian and for the students. The students could ask the librarian for help, but the librarian argues that it is not within her responsibilities and is supported in this stance by the professor.

In the present study both lines of demarcation are interpreted with reference to the community of justification of nursing in Sweden. As introduced earlier, the professional project of nursing enforces an academic nursing education in which these two lines become important. The question, both in this study and when discussing librarians' roles in teaching information literacy in general, is the positions librarians are given in relation to this community of justification. Librarians oscillate in their practice between the various communities of justification of the users and the librarians' own community of justification. This oscillation could be described in terms of a difference between embedded and generic information literacy expertise. If the librarian uses this boundary position (Holschuh Simmons, 2005) between different domains and manages to navigate between the two strands of seeing information

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literacy practices as either generic or embedded enterprises he or she has the potential to be regarded as an "authority on authorities" as Patrick Wilson expresses it (1983, p. 180).

The authors of the present article support the idea of having a users' perspective on information literacy practices. However, a 'user perspective' entails different things in different theoretical positions. From the sociocultural standpoint taken up here, users need to be understood and supported by taking the community of justification in which they participate as a starting point. In this article, we have shown how the attributions of librarians' expertise in relation to information literacy are negotiated. Empowerment of users' abilities in relation to information practices demands a willingness to step outside the often general and domain-independent perspective librarians have on information literacy. If this can be accomplished, a more mature understanding of how information literacy is defined and given meaning within the various communities of justification librarians serve can develop.

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Literature

Bruce, C.S. (1997) The Seven Faces of Information Literacy. Auslib Press: Adeleide.

Dorner, J.L., Taylor, S.E. & Hodson-Carlton, K. (2001), 'Faculty-Librarian Collaboration for Nursing Information Literacy', *Reference Services Review* 29:132-140.

Durando, P. & Oakley, P. (2005), 'Developing Information Literacy Skills in Nursing and Rehabilitation Therapy Students', *Journal of the Canadian Health Libraries Association* 26: 7-11.

- Gannon-Leary, P. et al. (2006), 'Use of Evidence by Nursing Students: An Interdisciplinary Study', Library & Information Science Research 28: 249-264.
- Gannon-Leary, P., Wakeham, M. & Walton, G. (2003), 'Making a Difference to

 Nurse Education: The Impact on HE Libraries', *Journal of Librarianship and Information Science* 35: 31-46.
- Holschuh Simmons, M. (2005), 'Librarians as Disciplinary Discourse Mediators:

 Using Genre Theory to Move Toward Critical Information Literacy', *Portal: Libraries and the Academy* 5: 297-311.
- Johannisson, J. & Sundin, O. (2007), 'Putting Discourse to Work: Information
 Seeking as a Tool in the Professional Project of Nursing', *Library Quarterly*77: 198-218.
- Kuhlthau, C.C. (2004), *Seeking Meaning: A Process Approach to Library and Information Services*, 2nd ed. Libraries Unlimited: Westport, Conn.
- Limberg, L. (1998), Att Söka Information för att Lära: En Studie av Samspelet Mellan Informationssökning och Lärande. [Experiencing Information Seeking and Learning: A Study of the Interaction Between two Phenomena]. Borås: Valfrid. Diss.
- Limberg, L. (1999), Three Conceptions of Information Seeking and Use, in T. Wilson (ed.) *Information Seeking in Context (ISIC'98) Conference Proceedings*, pp. 116-132.
- Limberg, L. & Folkesson, L. (2006), Undervisning i Informationssökning:

 Slutrapport från Projektet Informationssökning, Didaktik och Lärande

 (IDOL). [Teaching Information Seeking: Final Report from the Project

 Information Seeking, Didactics and Learning]. Borås: Valfrid.

- Limberg, L. & Sundin, O. (2006), 'Teaching Information Seeking: Relating

 Information Literacy Education to Theories of Information Behaviour',

 Information Research 12(1): paper 280. [Accessible:

 http://InformationR.net/ir/12-1/paper280.html <2006-10-20>]
- Lloyd, A. (2007), 'Learning to Put Out the Read Stuff: Becoming Information

 Literate through Discursive Practice', *Library Quarterly* 77: 181-198.
- Moore, P. (2000), 'Learning Together: Staff Development for Information Literacy Education', in C. Bruce & P. Candy (eds.), *Information Literacy Around the World: Advances in Programs and Research*, p.p. 258-270. Wagga Wagga, Australia: Charles Sturt University, Centre for Information Studies.
- Pilerot, O. (2006), 'Information Literacy: An Overview', in A. Martin & D. Madigan (eds.), *Digital Literacies for Learning*, p.p. 80-88. London: Facet.
- Sundin, O. (Forthcoming), 'Negotiations on Information Seeking Expertise: A Study of Web-Based Tutorials for Information Literacy', *Journal of Documentation*.
- Sundin, O. (2002), 'Nurses' Information Seeking and Use as Participation in Occupational Communities', *The New Review of Information Behaviour Research: Studies of Information Seeking in Context* 3: 187-202.
- Sundin, O. (2003), 'Towards an Understanding of Symbolic Aspects of Professional Information', *Knowledge Organization* 30: 170-181.
- Sundin, O. & Johannisson, J. (2005a), 'The Instrumentality of Information Needs and Relevance', in F. Crestani & I. Ruthwen (eds.), *Context: Nature, Impact, and Roles.* 5th International Conference on Conceptions of Library and Information Science, CoLIS 2005, p.p. 107-118. Berlin: Springer.

Borttaget: Berlin: Heidelberg

- Sundin, O. & Johannisson, J. (2005b), 'Pragmatism, Neo-Pragmatism and Sociocultural Theory: Communicative Participation as a Perspective in LIS', *Journal of Documentation* 61(1): 23-43.
- Talja, S. (2005), 'The Social and Discursive Construction of Computing Skills', Journal of the American Society for Information Science and Technology 56(1): 13-22.
- Tuominen, K., Savolainen, R. & Talja, S. (2005), 'Information Literacy as a Sociotechnical Practice', *Library Quarterly* 75: 329-345.
- Willman, A. & Stoltz, P. (2002), 'Yes, No, or Perhaps: Reflections on Swedish
 Human Science Nursing Research Development', Nursing Science Quartely
 15(1): 66-70.
- Wilson, P. (1983), Second-Hand Knowledge: An Inquiry into Cognitive Authority.

 Greenwood Press: Westport, Conn.