

Project “ETQIL”

course

User behaviour and information activities

Work book

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Introduction

This course addresses the sub-area of Library and Information Science known as Information behaviour. The basic assumption for the course is that the area in question can function as a useful theoretical base for informed professional library practice. In order to provide library users with timely services and information resources of high quality, librarians and other staff at modern libraries need to develop knowledge and skills pertaining to user behaviour and their information activities.

Focus

Since the research area of information behaviour is broad and long-standing it has been necessary to select some prominent themes which will constitute the focus of the course. The first theme concerns *basic concepts in information behaviour* and is thought to pave the ground for the two subsequent themes. Of crucial importance for all librarians is the issue of getting to know about the preferences and interest of their clients, i.e. the library users. For this purpose, the course is also dedicated to the theme of *methods for studying users*. Libraries of today are complex systems involving a range of different resources and services. For the users, they may therefore appear as difficult and complicated. Hence there is a need for libraries to facilitate pedagogical, educational services aimed at and suited for their various user groups. The third theme relates to this educational issue and deals with what has become known as *information literacy*.

Different types of libraries have their respective and particular user groups. This course is mainly focusing on research and university libraries, and the user groups that are likely to consult these types of libraries. This does not, however, mean that there are no opportunities for generalizations – some of the insights that will be gained during the course will also be relevant for other types of libraries. Another assumption permeating the course is that it is beneficial for librarians to consult research in order to improve and develop library practice. Research should here be understood as including two equally relevant dimensions: 1) documented and disseminated reports from (empirical) research projects that can function as

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inspirational and informative for the development of professional practice; and 2) an exploratory and systematic professional approach that can contribute to enhance the work carried out by library practitioners in their professional practice. The issue of research use in practice will be treated in the last module of the course.

Course design and previous knowledge

The course is designed to take 40 hours of individual and collaborative work. However, this amount of hours may vary among students depending on existing familiarity with the area that the course covers. It is assumed that the students are familiar with the existence of the research field of library and information science, and that they at least have heard of the terms “information behaviour” and “information literacy”. If this is not the case, it is recommended that the following two introductory texts are consulted before the course starts:

Wilson, T. (2000). Human information behavior. *Informing Science*, 3(2), pp. 49-55. Freely available via: <http://www.inform.nu/Articles/Vol3/v3n2p49-56.pdf>

Pilerot, O. (2011/2014). *The concept of information literacy*. Freely available via: http://www.adm.hb.se/~opi/The_Concept_of_Information_Literacy.pdf

The way the course is designed mirrors the pedagogical idea that interaction with peer learners is beneficial for learning. It is thus recommended that the students take the opportunities to participate in the indicated seminars. In addition to these seminars, there are also writing tasks that serve as opportunities for individual and collective reflection.

Learning outcomes

After completing the course, the participant will be able to

Learning Outcomes	
Knowledge	Skills

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... identify and apply in practical library work the basic concepts in information behaviour research	
Be familiar with the central concepts in the research area of Information behaviour and its potential implications for professional library work	With reference to central concepts in information behaviour research, describe, analyze and identify problems regarding users and information activities in practical library work.
... display an understanding of methods for studies of information activities in various practices	
Be familiar with different methods for investigating the practices of various library user groups	Analyze and draw conclusions about when and for what purposes various methods for studying users may be applicable
... identify differences depending on theoretical perspective in approaches to information literacy-training	
Understand the connection between theory and practice regarding different approaches to the concept of information literacy	Analyze the prerequisites and plan for information literacy-training for various user groups

Module overview

Module	Activity	Time
Basic concepts in information behaviour	Reading educational content	8 h
	Discussion seminar / Self reflection	2 h
Methods for studying users	Reading educational content	3 h
	Presentation seminar	3 h
Information literacy	Reading educational content	5 h
	Presentation seminar	2 h

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Research use in practice	Reading educational content	3 h
	Paper	10 h
	Presentation seminar	4 h
<i>Total</i>		<i>40 h</i>

Modules

Module 1: Basic concepts in information behaviour

Module 1 introduces a range of concepts central to the area of information behaviour research. When reading the subsequent text, try to imagine how you can relate the various concepts to specific aspects or situations in your professional activities. The text refers to a number of documents that can be consulted in order to enter deeply into the area. It is not expected that all of these documents shall be read within the frame of the present course. They should rather be seen as opportunities for further studies.

Structure and tasks

Preparation: Read the text under the heading Educational content

Discussion seminar (2 h, on site or webinar): The educational content for this part of the module presents ten concepts that can be used for thinking about, describing, and understanding how users interact with information in different contexts, for example in libraries:

Information; Information behaviour; Information needs; Information seeking; Information searching; Information encountering; Information avoidance; Withholding information; Information use; Evaluating information

With reference to the various interpretations of these concepts presented in the text, try to imagine how you can relate to the concepts. Ponder the following questions:

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Does it matter for your professional activities whether you interpret a concept one way or another?

How can the concepts be useful for your library work?

Each participant is expected to in preparation individually reflect on all the concepts. However, in the discussion each participant is expected to explicitly discuss at least two concepts in accordance with the instructions for the task.

Educational content

Information behaviour¹ is the most established term for labeling the sub-area of library and information science (LIS), which this module deals with. It is well explored and through a multitude of contributions it can be said to have matured over the years, both empirically and theoretically (Fisher & Julien, 2009, p. 38). At this date, there are a number of fairly substantial reviews of the area (e.g. Dervin & Nilan, 1986; Case, 2002, 2006, 2012; Fisher & Julien, 2009). Another label which is not as widespread is that of *Information, needs, seeking and use* (INSU)². An emerging alternative to these two is to describe the area as research on *information practices* (cf. Savolainen, 2007).

There are numerous examples of previous research that has investigated specific 'facets' of the complex of information behaviour such as information seeking, information searching and information use (e.g. Wilson, 1999; Ellis & Haugan, 1997 ; Kuhlthau, 1991; Bates, 2002), information needs (e.g. Taylor, 1968), information avoidance (e.g. Chatman, 1996; 1999), information encountering (e.g. Erdelez, 1997; Foster & Ford, 2003), and the establishment of credibility in information and information resources (e.g. Franke & Sundin, 2012).

¹ Information behaviour is a contested term (see for example "The behaviour/practice debate", 2009).

² It can for example be noted that there is a special interest group under the *American Association of Information Science and Technology* that goes under the name SIG USE, which stands for the special interest group of *Information Needs, Seeking and Use*.

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These information-related activities have been explored in a variety of social settings, often categorized in accordance with some overarching description, such as work-related information activities (e.g. Lloyd, 2009), everyday-life information activities (Savolainen, 2008), information activities in educational contexts (e.g. Alexandersson & Limberg, 2012), and information activities of scholars and scientists (e.g. Talja, 2002, Palmer & Cragin, 2008).

The aim of this text is to provide the reader with an overview of the basic concepts of information behaviour-research. The area of information behaviour is conceptually rich and many of the key concepts are quite theoretically loaded and open to a multitude of interpretations. In the subsequent paragraphs, we will touch upon some of the various interpretations. Before embarking on our “conceptual tour”, however, there is need for a short statement regarding the treatment of concepts that characterizes this survey. With Nicholas Belkin (1978), who in the following excerpt discusses the concept of information, the important distinction between *definitions* and *conceptualizations* can be clarified:

We are not concerned with *definitions* of information, but rather with *concepts* of information. The distinction is that a definition presumably says what the phenomenon defined *is*, whereas a concept is a way of looking at, or interpreting, the phenomenon... by accepting the idea of a concept one becomes free to look for a *useful* concept, rather than a universally *true* definition of information (Belkin, 1978, p. 58).

The line of reasoning expressed in the quote above is applicable to all the conceptual discussions presented in this text. It is not a matter of defining, but rather of presenting various conceptualizations that are of importance in information behaviour-research, and that, hopefully, can be applied in order to study and extend our knowledge and understanding of information-related phenomena.

Bawden and Robinson (2012, p. 188) point out that the concept of “information behaviour” has (at least) two connotations. They refer to Bates (2009, p. 2381) who makes the following distinction:

[Information behaviour is a] term used to describe the many ways in which human beings interact with information, in particular the ways in which people seek and utilize information. [It] is also the term of art used in library and information science (LIS) to

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refer to a subdiscipline that engages in a wide range of types of research conducted in order to understand the human relationship to information.

A central constituent of the majority of the concepts that will be dealt with in this text is the concept of information. We will be acquainted with concepts such as information seeking and -searching, information use and -needs (and a few more). It therefore seems reasonable to take the concept of information as our starting-point.

The concept of information has been extensively discussed within LIS over the years. Questions, theories, and opinions regarding how we shall treat and define the concept are numerous (e.g. Capuro & Hjørland, 2003). Both Bawden and Robinson (2012) and Case (2012) offer fairly generous accounts regarding different ways of approaching and understanding the concept of information. It is hence superfluous for this text to strive for a profound analysis of the concept. Let us briefly regard, however, Buckland's (1991) widely adopted and discussed distinction between three ways of understanding "information". He separates between:

- 1) Information-as-process – where "information" is that which changes what someone knows (i.e. *the act of informing*)
- 2) Information-as-knowledge – where "information" is "used to denote that which is perceived in information-as-process"
- 3) Information-as-thing – where "information" is "used attributively for objects, such as data and documents /.../ [which] are regarded as being informative". (Buckland, 1991, p. 351)

Depending on purpose and context, all of Buckland's conceptualizations may be useful. The reason for presenting them here is to highlight the open and interpretable aspect of the concept.

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Information needs

Even though the concept of information need is contested³ (Bawden & Robinson, 2012, p. 189) it is well established in the information behaviour-discourse.

An influential typology of information needs was developed by Taylor (1968). According to Case (2012, chapter 4) it is the most cited work in the area of information needs, and its visibility in the LIS literature continues to increase (Chang, 2013). Taylor's model depicts a process that includes four types of needs: 1) "the actual, but unexpressed need for information (the *visceral* need)"; 2) "the conscious, within-brain description of the need (the *conscious* need)"; 3) "the formal statement of the need (the *formalized* need)"; and 4) "the question as presented to the information system (the *compromised* need)" (Taylor, 1968, p. 182). The model acknowledges that some kind of negotiation in social interaction takes place – in Taylor's example, it is a librarian that interacts with the user and thus negotiate the need. According to the model, this is something that starts in relation to the formalization of the need and then continues into the fourth stage where the need gets compromised. The idea of a need as something that originates from within a person's brain is recognizable in several influential model-makers that have appeared after Taylor within the area of information behaviour. Three noteworthy examples are Belkin's idea of an "Anomalous States of Knowledge" (the ASK model); Dervin's "gap metaphor" (Belkin, 2005, p. 45); and Kuhlthau's "uncertainty principle" where "[u]ncertainty is a cognitive state that commonly causes affective symptoms of anxiety and lack of confidence" (Kuhlthau, 1999, no pag.) (cf. Lundh, 2010; Savolainen, 2012).

A different take on the concept can be found in contributions that emphasize the co-constructive and dialogical aspects of information needs. According to such an approach information needs are "formed through linguistically communicated

³Bawden and Robinson (2012) establish with general reference to the area of information behaviour that "[t]he whole idea of an 'information need' is a contested concept, some writers arguing that there is no such thing. Some scholars argue either that information needs are 'really' other kinds of need – so that a need for information on the location on the nearest pizza restaurant is 'really' an expression of a need for food – or that information needs are 'only' an expression of a psychological state of mind" (p. 189).

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processes of negotiations” (Sundin & Johannisson, 2005, p. 112); they are not “fixed entities residing in the head of the information seeker [but rather] collaboratively negotiated and constructed” (McKenzie, 2004, p. 685) (cf. Lundh, 2010). Sundin and Johannisson apply a neo-pragmatist stance in order to elaborate their idea of the situated nature of information needs and how these are socially shaped in interaction. They view the negotiation and the shaping of information needs as a social practice, which they define as “an institutionalized activity that consists of more or less formal sets of rules concerning, among other things, what should be considered ‘proper’ information seeking” (p. 112). These activities take place in different *communities of justification* “where the rules are negotiated and become formalized” (Ibid). In sum, it can be posited that people do experience information needs, but with reference to some of the literature in the field, it seems reasonable to assume that they arise through contextually bound negotiations about what is worth knowing in specific practices, rather than as visceral needs.

Information seeking

Information seeking is a concept in the field of information behaviour that is frequently used, but primarily on an empirical level. There is some variation regarding the exact meaning of the concept. In a much quoted passage, Tom Wilson defines “information seeking behaviour” as “the purposive seeking for information as a consequence of a need to satisfy some goal” (Wilson, 2000, p. 49). Reijo Savolainen, who like Wilson is a prominent researcher within the field of information behaviour, presents a somewhat broader and more theoretical definition. He conceives information seeking as “a major constituent of information behavior or information practices, that is, the entirety of ways in which people seek, use, and share information in different contexts” (Savolainen, 2009a). In the numerous models of information behaviour that exist (e.g. Wilson, 1999) information seeking tend to be described as a discrete part of the overarching concept of information behaviour. However, from a practice-based perspective on the study of information-related activities according to which the seeking of information is inextricably intertwined with and embedded in other activities, it is problematic to distinctively separate one activity from another; for example information seeking from information use. It should not be denied, though, that for analytical reasons it can

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be illuminating to speak in terms of information seeking as an activity in itself. Or, as stated by Palmer and Cragin (2008), even though “[a]ny given activity is best studied and understood as part of a larger field of disciplinary practice [...] there is also a need for a more thorough synthesis of results on what we have learned about specific activities” (p. 185). That is also the reason why this text presents the concepts as separable units.

A review of the literature within the field of information behaviour indicates that information seeking often is approached on the basis of a categorization of either specific roles or groups (e.g. information seeking of scientists, parents, students, insurance agents etc.); on the demographics of information seekers (e.g. tweens, the elderly, rural people etc.); or on the context where the information seeking takes place (e.g. in schools, in the workplace, in everyday life etc.). (cf. Savolainen, 2009a) Even though a researcher might be focused on information-related activities that are taking place in a research-work context, it is worth to point out that it is a delicate matter to draw an exact line between work and non-work (e.g. Given, 2002). There are, for example, empirical studies where the participants refer to aspects that appear as important for their information practices, which are not usually included in the general perception of what constitutes work. They may refer to locations and places outside the regular workplace and they can point at friendship as examples of aspects that matter for how they go about in order to search for, use, and share information.

Searching, encountering, avoiding, and withholding information

In Wilsons (1999) nested model of information behaviour, the activity of information searching is empirically conceived as a “sub-set of information-seeking, particularly concerned with the interactions between information user (with or without an intermediary) and computer-based information systems” (p. 263). Even though Wilson primarily discusses the three levels in his model as a series of nested fields for investigation that have attracted researchers in the field, the model can also be used in order to conceptualize the various activities that are discernible in an information practice. It is often useful to have an analytical concept that can be applied to a specific kind of activity that needs to be identified and discussed. For the same analytical reason, information encountering or serendipity can be

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pinpointed (e.g. Erdelez, 1997; Foster & Ford, 2003; Makri & Blandford, 2012a & b). To find information serendipitously implies that beneficial information is found by chance; it is about finding something that can be used without seeking for it, which is a phenomenon that has been identified as an important part of research work (e.g. Foster & Ford, 2003).

In some studies it is of specific interest to identify those instances where people encounter information that make them think of others, such as peers, to which they alert them (cf. Erdelez & Rioux, 2000). Also the concept of information avoidance (e.g. Narayan, Edwards & Case, 2011) can be useful. Narayan et al (2011), in their study of every-day life information activities, identify two aspects of the phenomenon – passive avoidance and active avoidance. The former kind is described as a “long-term avoidance of abstract information relating to one's long-held and deeply-held beliefs of self and identity” (p. 5), whereas active information avoidance is depicted as “a short-term rejection of information that was more of a stress-coping mechanism in response to some concrete information avoidance” (ibid). In a recent study (Pilerot, 2014) of researchers' information behaviour instances of active information avoidance were identified. It appeared as a means to keep oneself in accordance with the planned direction of research. Related to the activity of avoiding information is that of withholding information – i.e. “the intentional failure to share potentially useful information with others” (Haas & Park, 2010, p. 873).

Using information

Of all the concepts discussed in this module, “information use” is probably the vaguest and that which gives rise to the biggest variation regarding how to understand it. At least partly, this “porosity” is likely to be due to the concepts' dual potential capacity as both an empirical and a theoretical concept. A general, albeit tentative, conclusion that can be drawn from reviews of the concept of information use (e.g. Kari, 2010; Savolainen, 2009b) is that the conceptual vagueness also depends on the concept's vicinity to other core concepts such as “knowledge” and “understanding”, and to the related activities of for instance “analyzing”, “processing” and “constructing”.

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In an analysis of the LIS research literature, Kari (2010) discovered seven major approaches to the conceptualization of information use. A widespread empirically oriented approach is to conceive information use as the interaction with information sources where use implicitly is considered as a “subconcept of information search” (Ibid, no pag.). Meaning-making (e.g. Kuhltau, 2004) and sense-making (Dervin, 1983) are influential metaphors that are closely related to the activity of information use. These are in turn related to the idea of knowledge construction, for example through the means of discursive action (Tuominen & Savolainen, 1997). The various definitional approaches to information use that can be found in the literature mirrors Wilson’s (2000) definition of “information use behaviour” in that respect that it is an activity that is described, understood and discussed from both a cognitive and a physical perspective:

Information Use Behavior consists of the physical and mental acts involved in incorporating the information found into the person's existing knowledge base. It may involve, therefore, physical acts such as marking sections in a text to note their importance or significance, as well as mental acts that involve, for example, comparison of new information with existing knowledge (Wilson, 2000, p. 50).

In addition to the cognitive and physical aspects identified by Wilson (2000), we should also acknowledge the fundamental dimension of the understanding of information use, which concerns its situational and context-bound character. In line with Savolainen’s (2009b) analysis of Cook and Brown’s (1999), and Orlikowski’s (2002) concepts of *epistemic work* and *knowing in practice*, it can be established that information use is an activity that becomes meaningful first when “conceived of as an integral component of action or practice” (Savolainen, 2009b, no pag.), even though a result of this perspective is that “it may be difficult to identify phenomena that are specifically characteristic of” (Ibid) information use. A crucial issue is what the investigated people do with information. In order to present a fine-grained description and analysis of people’s doings with information, further, more specific concepts need to be employed.

Evaluating information

One such specific facet of information use is that of credibility assessment. The assessment of credibility in information and people is a ubiquitous activity (Rieh,

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2009) which is carried out on several grounds and where a multitude of dimensions are evaluated simultaneously. Rieh, (2009) presents a typology of credibility in which she takes as the point of departure three different foci for credibility assessment: sources, messages and media. Somewhat simplified it can be stated that a) *source credibility* concerns the assessment of people or groups of people; b) *message credibility* pertains to aspects such as content, structure, language and the presentation of a message; c) *media credibility*, finally, is concerned with the various media channels a message can be sent through. In her typology, Rieh (p. 1339) also mentions a number of variants of credibility which have been suggested by researchers that focus on social endorsement. Some of these are relevant for the analysis and discussion of credibility aspects in relation to, for example, information sharing. One such is *conferred credibility*, which relates to a source's or a persons' positive reputation. Another type of credibility, which is especially relevant in a scholarly context, is that of *tabulated credibility* according to which assessments are made on the basis of peer ratings such as is the case within the peer-review system.

Summary

To sum up the conceptual exposition presented in this module, we can apply the concepts to a specific imagined case. Let us think of a specific group of scholars; for example that of library and information science-scholars. It can be posited that it is possible to explicate several pertinent activities taking place in LIS scholars' information practice. They are contingently exposed to and have reasons to engage in all of the activities touched upon in the preceding paragraphs. They are involved in information seeking processes that are more or less planned, structured and extended, and which encompasses features of information searching. From time to time they encounter information by chance. They are constantly using information which often entails a focus on the assessment of credibility in information and in people that supply them with information. Occasionally and for various reasons they most likely perceive the need to avoid and also withhold information. These activities make up the backbone of the scholars' information practice.

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Module 2: Methods for studying users

A great deal of the research conducted within the area of information behaviour is aimed at investigating different user groups, often grouped in accordance with categories such as demography, occupation, users of a specific service, or educational level. This part of the course briefly presents a selection of research methods that may be applied in order to study, for example, library users. Most libraries do not have sufficient resources for conducting substantial research projects. Nevertheless, libraries of today face challenges and issues that call for investigations that can be carried out in the form of (small-scale) research and/or development-projects, either within the limits of existing funding or financed by temporary grants or subsidies.

The aim of the following text is not to provide the reader with extensive and detailed accounts for the methods mentioned, but rather to point in the direction of further

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readings. The text is wrapped up by presenting a handful of examples of how Swedish libraries have applied different methods for tackling contemporary problems and challenges.

There may be several reasons for why a library perceives the need to carry out some kind of investigation. In theory there are no limits for the sorts of investigations that can be conducted. Plausible efforts can range from rather simple inquiries into, for example, when most users tend to visit the library, which is an issue that can be explored through the means of counting visitors. It could also be of interest to, in a structured way, make the effort of finding out what kinds of questions library users ask in the reference desk. An indication about the latter could be obtained through a systematization of queries in accordance with a pre-established matrix of various kinds of questions that is filled in by the librarian in the reference desk. A somewhat more demanding effort, which requires more time and effort, is that which can be carried out in libraries that wish to refurbish or restructure the library room. One way of gaining valuable insights into a refurbishing process is to actually shadow the users around in the library room. Another aspect of shadowing is to apply it in relation to staff development, as is described by Cefai and colleagues (2007), where it aimed “to provide staff with an opportunity to gain an insight into the role of another in the library and to understand how that role fits into the library service as a whole”.

In a recent edited volume, Dobрева, O’Dwyer and Feliciati (2012) have gathered chapters which all concentrate on various aspects of user studies for digital library development. This book offers good introductions to different methods that can be applied in order to prepare for and develop digital library services. The book is divided into five sections of which the first is aimed at “setting the scene” for further studies into user behaviour of various user groups. Examples of methods that are accounted for are questionnaires, interviews, and focus groups. Another chapter introduces deep log analysis, a method that is briefly described in JISC (2010). In addition to these introductory chapters, the book also contains case studies related to the use of different methods in various settings (e.g. e-learning settings; digital libraries; course design; for mobile devices) and connected to a number of different user groups (e.g. children; students).

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The annual International Conference on Qualitative and Quantitative Methods in Libraries (QQML) offers an opportunity to overview what sorts of methods that are applied in libraries. When browsing the abstracts of the contributions to the conferences that have taken place recently, it becomes clear that a multitude of methods are used. In order to identify areas of research support-services in the need for improvement and development, Lund University Library conducted focus group interviews with researchers. It was concluded that the applied method was useful since it provided “valuable insights into the researchers’ experiences, opinions and needs for the future” (Wiklund et al, 2013). Ögland (2013) used observation methods for finding out what visitors do in the physical public library of Stockholm. The results of the study formed a basis for discussions and decisions regarding how to further develop the library room. In a study aimed at improving the website of Jönköping university library, Lorenzi and colleagues (2011) made use of a method that involved the creation of so called personas. To start with, depth-interviews and focus groups were conducted. The results from these were then used in order to create a set of personas, i.e. fictitious characters which allows for “consideration of the needs and attitudes of a wide spectrum of potential users”.

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Wiklund, G., Voog, H, & Kjellberg, S. (2013). It's all about keeping quiet - using focus group interviews to understand the everyday life of researchers in order to support their research. QQML, Rome, Italy. Abstract available February 7, 2014 via:

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Ögland, M. (2013). What do people do at the library? QQML, Rome, Italy. Abstract available February 7, 2014 via:

http://www.isast.org/images/Book_of_ABSTRACTS_2013.pdf

Structure and tasks

Preparation: Explore the books of abstracts from one or a couple of the recent QQML conferences (see links below). Try to identify a number of different methods.

http://www.isast.org/images/Book_of_ABSTRACTS_2013.pdf

http://www.isast.org/images/BOOK_OF_ABSTRACTS_2012.pdf

http://www.isast.org/images/Book_of_Abstracts_2011.pdf

Individual exercise: Relate to your own workplace and ponder what user-related issues or problems you may have to tackle, and what methods that perhaps can be useful to apply in order to address these problems.

Presentation seminar: Present orally a blueprint for a small-scale investigation that you imagine would be useful at your workplace. You are not supposed to actually carry out the investigation, but indicate what problem you would address, what kind of insights you hope to gain, and what method(s) you would apply in order to carry out the investigation.

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Module 3: Information literacy

There is a multitude of resources on the web that offer information on various efforts regarding information literacy. A prominent example is UNESCO's *Overview of information literacy resources worldwide*, which contains a range of selected resources, i.e. websites, books, journals and articles:

<http://www.unesco.org/new/en/communication-and-information/resources/publications-and-communication-materials/publications/full-list/overview-of-information-literacy-resources-worldwide/>

Since the aim of this module is to identify differences in approaches to information literacy-training, the above resource constitutes a suitable starting point. In order to prepare for the exercise relating to this module you should again consult:

Pilerot, O. (2011/2014). *The concept of information literacy*. Freely available via: http://www.adm.hb.se/~opi/The_Concept_of_Information_Literacy.pdf

A dominant theme in Pilerot's text is the categorization of what is termed the IL narrative into different strands. The text contains two tables. Both of the tables present ways in which the literature can be categorized, and the various categories are in turn related to different stakeholders' interests and views upon IL.

Exercise: Browse the list of IL resources put together by UNESCO. Find two or three resources that attract your interest. Apply the categorization presented in Pilerot's text and analyze the resources you have selected. Try to answer the following questions:

How would you describe the resources in terms of interests and stakeholders?

What audience is the resource that you are analyzing aimed for?

Are the resources characterized by a view upon IL as a

- goal for educational activities?

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- goal and means for politics?
- or is IL conceived as a study object?

Presentation and discussion seminar. Present briefly the resources you have selected for analysis. Communicate your findings, that is, account briefly for how you have answered the above questions.

After each participant has presented, you should discuss the implications for practice of your findings. For example: would it be beneficial to use in a training session at a university library a resource in which IL is conceived of as a goal for politics? How could you use such a resource in such a setting?

Module 4: Research use in practice

This last module has the potential to relate to all the three previous models. Module 1-3 have all had a certain focus on research related aspects of information behaviour. The present module aims to elucidate the connection between research and practice. Its starting point is a line of reasoning around the notions of *research* and *practice*. Already in the beginning of this handbook, it was asserted that research can be perceived in at least two capacities: in its capacity as “evidence”, and as a professional stance. This twofold conception includes the understanding of research as 1) documented and disseminated reports from (empirical) research projects that can function as inspirational and informative for the development of professional practice; and 2) as an exploratory and systematic professional approach that can contribute to enhance the work carried out by library practitioners in their professional practice.

How to understand the notion of practice is not as straight forward. It is somewhat problematic to think of practice in terms of something that emphasizes doing (and not thinking); as something that often seems to be portrayed in contrast to research, which in turn is seen as an activity characterized by the activity of thinking (and not doing). It is a dualism that risk contributing to strengthening the already profound dichotomies of mind and body, cognition and action, objective and subjective, structure and agency, individual and institutional, etc. The suggestion here is to think

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of research and practice in our field as two sides of the same coin, which is in line with an idea presented by Limberg and Sundin (2006). They write:

Information seeking [research] and information literacy are two sides of the same coin. Information seeking research has the potential to provide information literacy with a theoretical grounding and the empirical field of information literacy gives information seeking research an institutional context where the objectives for information seeking practices are formed.

In the quote above, it is suggested that research can provide practice with a theoretical grounding. For this to occur, practitioners will need to be able to identify activities that are open for improvement or development through consultation of research. They will also need to be familiar with the relevant research area. These two „needs” form the basis for the task that follow with this module.

Before we consider the instructions for the task for this module a brief and general example of a situation in which research use in practice is a reasonable strategy will be presented.

For example, if I am a librarian who works with teaching students for information literacy, I would most likely benefit from knowing more about the ways in which my student group (is supposed to) seek for and use information. In order to learn more about this particular issue, I could design a small-scale study of my user group. In relation to this work I could benefit from my knowledge of theories and concepts that can be used in order to conceptualize and find out general research-based information about students' information seeking and use habits. In the study, I could also apply some kind of method, similar to one or a couple of the methods that I have been acquainted with through this work-book.

Structure and tasks

Preparations: Consider the theoretical and research-oriented material that you have had an opportunity to become familiar with through engaging in module 1-3. Try to identify scenarios or activities in your workplace that you think could benefit from a theoretical grounding. With the aim of writing a short paper in which you

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argue for how research could be used in order to inform and improve a certain part of your professional practice, you should start by narrowing down your focus of interest so that you have a small number of potential examples of such connections between your knowledge about research and your professional practice.

Presentation seminar (3 h, on site or webinar): In this seminar, which can be seen as a preparation for the paper writing task, the participants are supposed to take turn in presenting the examples that were generated through the preparations.

Paper: The next step is to write a short paper. The paper is ideally structured accordingly:

- I. Presentation of scenario(s)
- II. Presentation of selected applicable research
- III. Potential benefit

Hand in your paper for assessment. The paper should be 1500-2000 words.

Educational content

Limberg, L. & Sundin, O. (2006). "Teaching information seeking: relating information literacy education to theories of information behaviour". *Information Research*, 12(1) paper 280. [Available at <http://InformationR.net/ir/12-1/paper280.html>]

Course assessment

The course contains two one written assignment and four seminars.

The successful participant is expected to have concluded the following tasks in a satisfactory manner:

1. Active participation in a minimum of three seminars.
'Active' is defined as having contributed to the groups' discussion and/or made presentations.

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2. Research-Practice paper.

The paper should adhere to the following criteria:

- i. be written in a clear, correct language, be well structured, and reference any sources using a reference system (e.g. APA)
- ii. follow the instructions by addressing the outlined issues (I-III)
- iii. provide correct information and well-founded arguments that show that the author is knowledgeable about the topic

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Instructions for trainers

An educational idea behind the design of the course is that an important way in which participants learn is with and from each other. A key element is therefore seminars where the participants interact with each other and with you around the course topics. The course also includes self-studies in the form of reading educational content and preparing assignments. The assignments are designed to let participants come in contact with and use various relevant texts.

Your role in the course is primarily to interact with the participants in order to support and assess their learning. This includes the following:

- moderate the seminars (or webinars): support the participants' learning (c. 11-12 hours, excl. preparation time)
- encourage the participants to introduce themselves on the learning platform (unless everyone already knows each other) (c. 30 minutes)
- answer questions and monitor discussions on the learning platform (the group can decide on voluntary discussions) (time depends on amount of questions and discussions)
- assess the course in the following ways:
 - keep track of active participation in the seminars
 - assess the paper and provide brief comments to the author (c. 1 hour and 15 min/paper)

Module 1

Initiate the course by presenting yourself and inviting the participants to introduce themselves briefly on the learning platform.

The trainer's main involvement in this module is to lead the discussion seminar.

Seminar 1

Make sure that everyone gets a chance to be active in the discussion and that each participant explicitly reflects on at least two of the concepts dealt with. Contribute

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your own knowledge to a reasonable extent and help the group summarize and draw conclusions based on their discussion. Note active participation for assessment purposes.

Module 2

The trainer's main involvement in this module is to lead the presentation seminar.

Seminar 2

Decide beforehand on how long the presentations can be, depending on the time available and the number of participants, and inform the participants. If the group is too large, perhaps dividing them into two seminars could be an option.

Keep track on each participant so that he or she covers in the presentation the points specified in the instructions: 1) What is the identified problem?; 2) what are the assumed insights to gain; and 3) what method(s) is(are) selected?

Module 3

The trainer's main involvement in this module is to lead the presentation and discussion seminar.

Seminar 3

Decide beforehand on how long the presentations can be, depending on the time available and the number of participants, and inform the participants. Do also assign time in the seminar for a general discussion related to the presentations. If the group is too large, perhaps dividing them into two seminars could be an option. In addition, keep track of questions answered. As a moderator of the discussion, try to remind those participants that have not answered all of the questions originating from the preceding exercise.

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Module 4

This module contains one seminar and one par writing-task. The seminar can be seen as a preparation for the paper writing-task. An assumption is that the comments and reflections that will be ventilated in the seminar can be of use when writing a paper. For this reason, it is important that there is a fair amount of time between the seminar and the date for submitting the paper.

Seminar 4

Begin by letting the group decide if, and if so how, they will document their discussion (e.g. by noting the variations and frequency of various suggestions for example scenarios). Make sure that everyone gets a chance to be active in the discussion. Contribute your own knowledge to a reasonable extent and help the group summarize and draw conclusions based on their discussion. Note active

Assessment

The assessment of the course as a whole should be based on the learning outcomes and the assessment criteria.

Seminars: Keep track of participation and activity in the seminars

Paper: Assess the paper based on the assessment criteria. Language and every piece of information or every argument do not need to be entirely without flaw in order for the paper to be acceptable, but the paper as a whole should show that the author has grasped the main content, and it should not contain too obvious misunderstandings or outrageous proposals. If this is the case, so that the paper does not reach the level of a Pass, the author should be allowed to revise the paper. Try to provide at least some comments to each author, pointing out interesting approaches or solutions as well as any problematic suggestions.

Each part of the assessment is graded with a Pass or a Fail, and the participant needs to reach a Pass on each part in order to receive a Pass on the course as a whole.

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How to update the material

The course is based partly on content that should be relevant for the foreseeable future.

Preparations for trainers

If you do not have extensive experience in the area, read Wilson (2002) and Pilerot (2014), along with the specified educational content above.

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Instructions for course designers

I would suggest that the introduction, the text about each module, and a few other texts are made into separate pages on the learning platform. This would result in the following pages:

- Introduction to the course [which includes Learning Outcomes]
- Module overview
- Module 1: Basic concepts in information behaviour
- Module 2: Methods for studying users
- Module 3: Information literacy
- Module 4: Research use in practice
- Course literature and resources [all references and links could, in addition to being included in each module, be gathered on this separate page]
- Course assessment
- Course evaluation [assuming there is a standard for evaluating the courses – an evaluation has not been provided in this package]

Furthermore, the following could be included as documents in a document folder:

- A discussion forum for participants and trainer, including five discussion threads [if possible, the trainer should also be able to add new threads]:
 - General course issues
 - Module 1
 - Module 2
 - Module 3
 - Module 4
- A possibility for participants to share documents with each other
- A place for participants to upload their papers and exercises to the trainer

If the course is offered with webinars, participants need access to a video conferencing system with the possibility of displaying documents (e.g. PowerPoint presentations).

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It would be advantageous if the URL:s are made into links to the external sites, and opened in a new tab or window. NB! Even though all the external educational content is available online free of charge in some version, most of it is covered by copyright restrictions. Where available, I have included links to translations into other presumably relevant languages (primarily Russian). If this is not deemed relevant, do not include these links on the learning platform.

All participants can have access to all the content from the beginning.

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