Summaries

Ulla Freek Uhrshov: Er der forskel i søgeadfærd mellem humaniora- og naturvidenskabsstuderende? (A comparative investigation of information seeking behaviours of humanities versus science students)
Page: 5

The article deals with an empirical, comparative investigation of information seeking behaviours of students in the humanities versus science students', when searching a webbased OPAC. The hypothesis of the investigation is whether academic discipline is a determining factor for the seeking behaviour of an individual. The conclusion is that there can be found no significant differences in the searching behaviour of the two groups. Further, the article reports on the seeking behaviour of 4 test persons and the difficulties they experience using the system due to lack of conceptual and semantic knowledge. The article primarily focuses on the methodological issues such as choice and definition of variables, use of inferential statistics, choice of IR system and the implications of these choices, as well as the results of the investigation.

Morten Hertzum: Produktudvikleres informationsadfærd og brug af informationskilder: Konsekvenser for søge- og informationssystemer (Engineers' Information-Seeking Behaviour and Use of Information Sources: Consequences for Retrieval and Information Systems)
Page: 21

Engineers such as product and software designers spend a considerable amount of their time getting input to their work and issuing information about their work to others. Studies of engineers' information-seeking behaviour provide evidence that they spend 40%-66% of their time communicating. Furthermore, studies indicate that projects reach better outcomes when the project staff communicates more. Engineers' information seeking is a complex, dynamic, multifarious, and continuous activity, which has been the subject of numerous studies. These studies have, however, not accumulated to form a unified understanding. This study focuses on how engineers acquire the information they need – on their information sources. The purpose is to (1) show that engineers are crucially dependent not only on *documents* but also on *people* and *experimentation* as sources of information and, thereby, (2) contribute to creating a viable foundation for the design of retrieval and information systems for engineering designers.

Many efforts to strengthen organisations' documentation and document management seem to overestimate the ability of documents to convey meaning and underestimate the amount of work required to write meaning into and read meaning

out of documents. The apparently ever-increasing storage capacity of computers has made it feasible to store literally every document produced or received in an organisation but studies of engineers' information-seeking behaviour provide evidence that documents are only a supplementary source of information. Instead, engineers search for people to get trusted opinion and enter into creative discourse, interact socially to get information without engaging in explicit searches, and experiment to gain experience with the materials they are using, explore what the product could look like, and facilitate future users in uncovering their requirements toward the product.

To support engineers' information-seeking activities effectively it is necessary to consider not only document retrieval but also the use of people as information sources. Searches for people can, to some extent, be performed by using document retrieval systems to identify authors who can then be contacted. Given the immense importance of interpersonal communication in engineering work it does, however, seem well worth the effort to consider designing services dedicated to searching for people. Further, retrieval and information systems could be directed toward the creative part of the design process and aimed at supporting experimentation. Such systems must be carefully integrated into the design process and created specifically to support, for example, scenario-based design. Thereby, these systems will come to look less like conventional information sources but that is just an indication that they have become an integrated part of the design process, rather than constitute an appendix as many document archives do.

Kasper: Hornbæk: Menneske-datamaskine interaktion i informationssøgesystemer: evaluering af brugs- og læsevenlighed (Human-computer interaction in information retrieval: evaluation of usability and readability)
Page: 31

Information retrieval systems aim at supporting users in accessing, searching, and reading information. This paper discusses how to evaluate such systems.

From a background in Computer Science and Human-Computer Interaction, I argue that usability and readability should be considered in any evaluation of information retrieval systems. Usability concerns the effectiveness, efficiency, and satisfaction with which users solve tasks. Readability concerns the ease and satisfaction with which users read and comprehend documents, and the degree of support for navigation in the documents. These concepts resonate well with current attempts in Information Retrieval to move away from using recall and precision as evaluation measures. In addition, usability and readability emphasize the importance of user interfaces in Information Retrieval and of involving users in evaluation. The utility of usability and readability in evaluating information retrieval systems is illustrated with two examples. One example presents an evaluation of a thematic map interface. Thematic maps show documents arranged on a map in a way that reflect similarities in their content. The map also shows words that describe themes in the document collection. The evaluation compared thematic maps to a text-based information retrieval system on usability measures such as interactive recall, task completion time, and satisfaction. The example shows how different usability measures, such as time and satisfaction, may contradict each other. A detailed analysis reveals how subjects used the map for searching. This analysis shows that the map is sometimes misunderstood and that subjects occasionally browse the map aimlessly. The second example concerns three interfaces that support reading and navigation of documents. Information visualization techniques were used to create an overview+detail interface and a fisheye interface; a linear interface was used as a baseline against which to compare the two other interfaces. Using these interfaces, 20 subjects wrote essays and answered questions about scientific documents. Subjects preferred the overview+detail interface and with this interface wrote essays that receive a higher grade. Subjects completed essays faster with the fisheye interface, but gained a less complete understanding of the documents read. We studied the reading process through visualizations of how subjects read the documents. This analysis reveals that the overview distracted the subjects and lead to unnecessary exploration of the document when subjects answ-

ered questions. The visualizations of reading patterns also show how the fisheye interface lead to a more overview-oriented reading style. With this reading style, subjects used less time on reading linearly through the document and more time on gaining an overview of the document. In conclusion, usability and readability are useful notions on which to base evaluations of information retrieval systems. The two examples show that different aspects of usability might contradict each other and that measuring usability properly is complex. The studies of readability suggest that user interfaces may support reading better. This type of support is virtually unexplored in Information Retrieval. In both examples, detailed analysis of the interaction between users and interfaces leads to plausible explanations of the differences in usability and readability. I suggest that usability and readability be systematically explored in future evaluations of information retrieval systems.

Dorte Skot-Hansen:Evalueringer som kulturpolitisk instrument (Evaluations as a cultural policy instrument)
Page: 45

This article is based on a general discussion seeking to clarify whether evaluations generally serve as a change parameter or ritual practice, i.e. as a compulsory political and administrative ritual in the reflexive modernity. Evaluation symbolises, according to Dahler-Larsen and Krogstrup (2000), a willingness to self-development in the light of feedback in a society, which increasingly lacks a centre with a total view and where the most essential decisions are made via permanent and uncoordinated feedback loops at several levels of complex systems.

In the field of cultural policy there is also an increasing demand for evaluations as a basis for political decisions, and the evaluation boom has – although a bit delayed – hit cultural experiments, programmes and institutions. A salient feature of the evaluations in the field is their adhoc nature, which reflects a lack of a set of aims and objectives that could underlie a current evaluation of Danish cultural policy as well as the extensive scatter of the parties undertaking projects, activities, assessment exercises, etc. This scatter has contributed to further fragmenting a research community in the field, which already appears fragmented. Besides, it is a question how you can best ensure that the arm's length between administration and research in the field of cultural policy research can be maintained.

Langsted (1998) demands a critical research approach, which to a greater extent gets involved in exchange of views and dialogue with the decision makers. His solution emphasises a non-legitimising line of research and a change of the researcher's role towards what Habermas has labeled the "pragmatic model". To Bjørkås (1998) the answer is closer to a strengthening of the critical academic environment allowing for a critical reflection, which also encompasses commissioned research activities.

These problem areas prompt a discussion of the following issue: How should the ideal organisation of the cultural policy-related research activity, considering both the arm's length and the quality of research, look like?
For this purpose, four models for evaluation research are designed (Albæk m.fl. 2001): *The Centre Model, the Special Unit Model, The Consultant Model and the Outsourcing Model.* These models are reviewed and the Centre for Cultural Policy Studies at the Royal School of Library and Information Science is used as an illustration of a hybrid between the Centre Model and The consultant Model in that this Centre is organised as self-financing unit, which at the same time is rooted in a research environment and as such entrusted with peer evaluation tasks.

In examining the research-based evaluation type, the evaluation study concerned with the Danish Ministry of Culture's Development Fund conducted by Centre for Cultural Policy Studies is used as a case (Balling, Fazakerley and Skot-Hansen 2001). A characteristic feature of this evaluation study is

- that it is *theory-based*, that is that it is based on a more theoretical discussion of the cultural policy and the role of art in the late modern society,

- that the *context* included, i.e. that the purpose and action plan of the Development Fund is not evaluated solely in relation to its own "performance rate" - the ability to achieve its own purpose - but is related to the current cultural policy as formulated and implemented by the Government, and
- that the *aesthetic aspect* is included in that experts in the fields of culture and art are drawn upon in the processes of evaluating the cases selected. In this way, the assessment of the quality and art related dimensions is strengthened. These aspects are frequently missing in the evaluation studies, which are solely based on academic expertise of a sociological and organisational nature.

It is concluded that it is important to maintain different approaches to cultural policy research so that competition can further a variety of evaluation concepts and methods. Competition should not be in terms of price, but should be approached so as to see whether the evaluation conducted can come up to the requirements for scientific methodology and the independence of research and a move towards this goal can only be strengthened concurrently with efforts to extend and consolidate the general research environment in which cultural policy research activities are undertaken. In this way evaluation can function as a change parameter instead of a ritual praxis.