

Diverse Approaches to “Tasks” in Information Science: Conceptual and Methodological Insights

Sponsorship: SIG-USE, SIG-HCI

Contributors – in alphabetical order

Theresa D. Anderson (Convener and Presenter), Faculty of Arts and Social Sciences, University of Technology, Sydney, NSW, Australia

Katriina Byström, Swedish School of Library and Information Science, University College of Borås (UCB), Sweden

Luanne Freund, School of Library, Archival, and Information Science, University of British Columbia, Vancouver, BC, Canada

Louise Limberg, Swedish School of Library and Information Science, University College of Borås (UCB), Sweden

Eric M. Meyers, The Information School, University of Washington, Seattle, USA

Elaine Toms, Faculty of Management, Dalhousie University, Halifax, NS, Canada

Introduction:

The “task” is an important concept in Information Science, both as a theoretical and methodological tool (Byström, 2007; Limberg, 2007; Vakkari, 2003). While many studies of information retrieval and information seeking and use take individual characteristics or system features as the starting point for their research, a growing body of work has focused on the socio-cultural perspective. This approach examines the relationship between tasks and search processes, as well as information-intensive task features and anticipated learning or work outcomes in a given context (e.g. Hansen & Järvelin, 2005; Ingwersen & Järvelin, 2005). This latter perspective has been utilized in the emerging work on collaborative information behavior, which recognizes the interplay of actors, environments, and task demands in understanding information seeking (Talja & Hansen, 2006).

Building on prior discussions of task-oriented research, including the well-received and attended discussion at ASIS&T in 2004 (Byström et al, 2004), and the NORSLIS workshop in 2006 (Byström, Sundin, & Limberg, 2006), this panel of well-known and emerging scholars from Australia, North America and Scandinavia will further explore how tasks may guide information seeking and retrieval theory and research. Panelists will present a balance of conceptual investigations, as well as recent empirical studies, to illustrate the wide-array of issues and insights in this area.

Of particular concern to this panel will be the role of diverse perspectives in understanding tasks: how cultural and contextual dimensions of user behavior condition the manner in which we conceptualize tasks, as well as how tasks are utilized in contextually-sensitive information seeking and retrieval research. The strength of this panel is its diversity: in the spirit of the 2009 ASIS&T Annual Meeting theme, we will explore how, in a pluralistic society, no one presentation on “task” can truly encompass the concept. The topics covered will span life-long (childhood through adult) as well as life-wide (formal and informal) contexts of behavior. By bringing together an array of perspectives on this topic, we will foster a wide-ranging discussion of theoretical and methodological issues surrounding task-oriented research, including:

- How can different approaches to the “task” (system, individual, socio-cultural perspectives) inform information behavior research?
- How do diverse contexts of information work affect task outcomes?
- How does the socially distributed or collaborative task affect our understanding of information seeking processes and products?

- How do we translate task-oriented research into system requirements and practice recommendations?
- How can we incorporate lifespan approaches in the analysis of tasks?
- What are emerging methodological approaches to the study of tasks and task-based behaviors?

To close, the panel will invite the audience to share their own approaches to “the task” in research and in practice.

Panel format:

The panel speakers will present recent empirical or conceptual work focused on “tasks” in information seeking and retrieval studies. As the panel is rather large, each speaker will be given ten minutes to present his or her research, and time limits will be strictly enforced. This will allow approximately 30 minutes for the panelists to engage in open discussion with the audience and with each other regarding the intersections of their theoretical or empirical work.

Each presenter will pose a question at the end of his or her talk to engage the audience in reflection; these questions will be re-posed at the conclusion of the presentations to ground and stimulate discussion. The convener of this panel has organized and participated in large, diverse panels at ASIST, and finds this confluence of perspectives to be an engaging and exciting approach to fostering discussion in this domain. We believe this format lends a diversity of perspectives that can provide a dynamic and fruitful forum to discuss the topic from different points of view. Through these presentations, the audience and panelists will be invited to speculate on reasons for the seeming durability of the task as an analytical unit across a range of diverse contexts.

Presenters (in alphabetical order):

Theresa D. Anderson (University of Technology, Sydney, NSW, Australia)

Anderson draws on her ethnographic study of academic work practice and the relation between her informants’ conceptions of the task at hand and core LIS concepts of “relevance” and “uncertainty”. Her contribution will also illustrate the ways that research tasks and search tasks co-exist and the conditions in which they intersect.

Katriina Byström (Swedish School of Library and Information Science, University of Borås)

Byström has focused on task-based analysis in information seeking (and retrieval) studies for nearly two decades with a recent interest to incorporate the task-based methodology into the area of information architecture. As the initiator of the 2004ASIST panel and the NORSLIS workshop in 2006, Byström offers a valuable link to the theoretical and methodological growth of task-based research. Her presentation will foster discussion about the common traits of (or differences between) outcomes of task-based information work on different arenas.

Luanne Freund (School of Library, Archival, and Information Science, University of British Columbia)

Freund’s research focus is at the intersection of human-computer interaction and information retrieval. She has studied how tasks and documents genres are related and how tasks, domains and contexts shape searching and selecting behavior. Her contribution to the panel will draw upon information retrieval research in the corporate and public sectors and will propose the use of task models to improve the utility of search systems.

Louise Limberg (Swedish School of Library and Information Science, University of Borås)

Limberg will use examples of findings from her research on information seeking in contexts of education and learning to discuss conceptual meanings of task for information behavior research. The analysis will be framed in a socio-cultural perspective of learning. In addition to examining learning assignments as

task in information seeking research, as one of the members of the 2004 ASIST panel and a co-convenor of the NORSLIS workshop in 2006, she contributes continuity to the panel discussion on this topic.

Eric M. Meyers (The Information School, University of Washington)

Meyers will discuss the design, testing, and use of complex inquiry tasks with children as part of an empirical study of middle school students' collaborative information seeking and use with discrete learning outcomes. Meyers will provide background on task-oriented methodological approaches with children, and illustrate how he addressed and issues of complexity, prior knowledge, measurement, and contextual sensitivity in implementing his research.

Elaine Toms (Dalhousie University)

Toms' contribution to the panel will draw on her research interests and experiences surrounding the design of systems for optimum human use. She will discuss ways that the task as a concept and as an analytical tool contributes to understanding how people work and use information and how people use existing systems to accomplish their work.

References:

- Byström, K. (2007). Approaches to "task" in contemporary information studies. *Information Research*, 12(4) paper colis26. Retrieved 21 January, 2009 from: <http://InformationR.net/ir/12-1/colis/colis26.html>
- Byström, K., Sundin, O., and Limberg, L. (2006). Task-based research in work and educational settings. *Proceedings of Nordic Research School in Library and Information Science (NORSLIS)*, October 15-17, 2006, Boras, Sweden.
- Byström, K., and colleagues (2004). Conceptions of task as a methodological issue: Scandinavians on information seeking and retrieval research. Panel presented at the *2004 ASIST Annual Meeting*, Providence, RI, November 13-18, 2004.
- Hansen, P., & Järvelin, K. (2005). Collaborative Information Retrieval in an information-intensive domain. *Information Processing and Management*, 41(5), 1101-1119.
- Ingwersen, P., & Järvelin, K. (2005). *The turn: Integration of information seeking and retrieval in context*. Dordrecht, The Netherlands: Springer Verlag.
- Limberg, L. (2007). Learning assignment as task in information seeking research. *Information Research*, 12(1) paper colis28. Retrieved 23 January, 2009 from: <http://InformationR.net/ir/12-1/colis/colis28.html>
- Talja, S., & Hansen, P. (2006). Information sharing. In A. Spink and C. Cole (Eds.), *New directions in human information behavior*. Information Science and Knowledge Management Series no. 8. pp. 113-134. Dordrecht, The Netherlands: Springer Verlag.
- Vakkari, P. (2003). Task-based information searching. In Cronin, B. (Ed) *Annual Review of Information Science and Technology*, 37, 413-464.