

# Information: Interactions and Impact (i<sup>3</sup>) – an Introduction

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The effective delivery of information services that meet the needs and aspirations of citizens, decision-makers and life-long learners is a long standing goal of the information professions. Interest in understanding the impact of information and information services on learning, social inclusion and economic development has been reflected in both the research and professional literature in recent years. However, the impact of information services and systems on the quality of decision-making and learning depends on the interaction between users and information. The complexity of this user-information relationship has been the subject of information behaviour research for many years, resulting in the development of models and theories particularly focussing on information seeking and a growing acknowledgment of the influence of context and task on information behaviour. Those involved in information literacy research or practice are also concerned with the user-information interaction and how it can be made more effective, seeing the effective use of information as a means of empowering individuals and communities in problem solving and lifelong learning.

The growing research bases which inform our understanding of information behaviour, information literacy and impact of information have largely developed along their own distinctive lines. Yet their common interest in the information user suggests that there should be points at which these lines of research could and should connect if we are to fully understand the complex nature of

the user-information interaction. For example, we have evidence and models of information behaviour in different contexts, but how much do we know about the impact of these behaviours on the quality of decision-making or learning? We talk of a relationship between access to information and social inclusion or economic development – but how does this relationship work in human terms? How well do our models and pedagogies for information literacy relate to real-world information behaviours in learning, decision-making, problem solving in workplace, community, education or home environments? How does the quality of the user-information interaction influence the impact of library and information services? Are systems being designed to meet the behaviours and skills of today's information users and, equally, are new information environments changing the way people seek out and use information? What are the methodological challenges of addressing such issues?

This special issue of *Libri* focuses on a selection of papers originally presented at the first 'Information: Interactions and Impact (i<sup>3</sup>)' Conference in Aberdeen, Scotland, 25–26 June 2007 (<http://www.i3conference.org.uk>). This research-based conference was concerned with the quality and effectiveness of the interaction between people and information and how this interaction can bring about change in individuals, organisations, communities and society. The conference aimed to bring together academic and practitioner researchers with interests in:

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- the quality and effectiveness of user-information interactions (e.g. information literacy)
- information behaviour in different contexts
- impact of information or information services on people, organisations, communities and society (e.g. social, learning, cultural and economic outcomes of engagement with information)

Thus the *i*<sup>3</sup> papers presented in this issue, and others which will appear in future issues of *Libri*, each examine one or more of these facets of the user-information relationship. Kuhlthau's keynote presentation sets the scene by illustrating the way that her own research into the Information Search Process has been informed by, and resulted in, greater understanding of the relationships between information behaviour, information literacy and impact of information. Kuhlthau's work demonstrates the value to the researcher of the integration of these concepts in developing a more holistic understanding of the user-information relationship. However she also draws out messages for practitioners and the need for more innovative approaches to meet the challenges of information provision in the 21<sup>st</sup> century.

The nature of some of these challenges is evident throughout the range of *i*<sup>3</sup> papers presented here. In the context of health education, Ek and Widén-Wulff relate the individual's ability to master information in everyday life-contexts to the perceptions of health and social status. Their work builds on the sense of coherence (SOC) theory which they argue provides the kind of holistic framework, taking account of cognitive, instrumental, emotional and socio-cultural perspectives, needed to understand the use of information and the nature of information literacy in complex real-world contexts.

A number of *i*<sup>3</sup> papers focussed on the challenges and impacts of teaching information literacy. Limberg analyses the findings from three previous studies of the interaction between information seeking and learning, identifying issues relating to varying perceptions and understandings of information literacy between researchers and practitioners, learners and teachers, teachers and librarians. Her work develops understanding of the importance of context (in this case learning and teaching within a formal educational setting) to both understanding and developing information literacy. Like Kuhlthau, Limberg recognises the need for new approaches to 21<sup>st</sup> Century informa-

tion challenges, in this case highlighting changes in approaches to teaching information literacy and a need for much closer interaction between research and practitioner communities.

Lundh and Limberg examine findings from qualitative studies in elementary schools, reflecting on the relationship between information literacy teaching approaches, information behaviours and learning. The paper draws attention to the different underlying context-bound perspectives and assumptions that influence the teaching of information literacy, and identifies the need for further research to develop understanding of the relationship between information literacy and the wider notion of literacy.

Streatfield and Markless also focus on the impact of information literacy teaching, this time in a higher education context. The paper reflects on progress and findings from a major action-research programme in UK universities not only to examine the impact of information literacy teaching but also to develop research methods and tools to meet the needs of practitioner-researchers. The authors draw attention to significant gaps in information literacy research and propose new approaches, based on understanding of the user perspective, to evaluate information literacy interventions in higher education.

In their paper on community information literacy, Partridge, Bruce and Tilley address the need for better understanding of the role of information literacy in real-world contexts outwith the education and workplace settings which have received relatively greater attention to date. Drawing on findings from three specific studies, they examine the emergent issues, research questions and methodological approaches that have informed developments to date, and go on to propose a new Australian research agenda for community information literacy.

In the final paper in this issue Connaway *et al* move the focus on to the challenges of developing effective library services to meet the needs of different generations of users with different information seeking preferences. The paper is based on an understanding that information behaviours will have been shaped by changing information technologies and environments and that an understanding of the varying needs and habits of today's information users is fundamental to the development and impact of library and information

services. This paper presents research which illustrates the contrasting characteristics and needs of different generations of information users and reflects on the implications for library services.

While papers in this issue explore information interactions in educational, community and library contexts, further *i<sup>3</sup>* papers to appear in forthcoming issues of *Libri* will extend the range of contexts to include organisational and workplace settings. In a paper based on her *i<sup>3</sup>* keynote address, Cheuk will examine the impact of information literacy on the delivery of business value. She reflects on the lessons learned from action-research into the experiences of an information literacy intervention in a workplace context, reflecting on implications for the impact of information in the organisation as well as the nature of effective workplace interventions. Toledano-O'Farrill will also explore the workplace setting in his examination of the relationship between information literacy and knowledge management. His paper questions the relevance of existing information literacy models and frameworks for the workplace setting and develops a theoretical framework to underpin ongoing studies into effective information use in a health sector organisation. A paper by Makani will explore knowledge management within international organisations, drawing on research that examines a complex range of cultural and organisational factors which influence the creation and sharing of knowledge, and again suggesting new roles and innovative approaches for information professionals.

Four further *i<sup>3</sup>* papers in future issues will focus on user-information interactions in internet-based environments. Kim will examine how the nature of daily life tasks influences related information seeking behaviours on the Web. The paper stresses the importance of understanding user behaviours as a prerequisite for the development of more effective information systems. Martzoukou also looks at Web user behaviour, in this case students'

use of search engines. Martzoukou is concerned with attitudes, motivations and self-perceptions of students about their own information behaviours and draws out clear implications for information literacy education. Marcella, Baxter and Cheah are also concerned with the impact of Web environments. Through an analysis of the development and use of websites in recent elections their paper reflects on the way such environments are impacting on the information and communications behaviours of political parties and their interaction with the electorate. A paper by Kindilchie and Samarraie will examine the impact of new networked information services on quality and effectiveness of information interactions amongst academic staff in the University of Qatar, and the implications for the delivery of effective library services.

These papers, together with the wider range of evaluative feedback and discussion that took place within the *i<sup>3</sup>* conference, reflect a strong interest in exploring the interconnections between the various strands of information behaviour, information literacy and impact of information. The sample of papers here illustrates a number of recurrent concerns – the need for new approaches and perspectives that more adequately develop our understanding of the use of information in real-world contexts; the understanding that information use and the judgements that we make about information in real-life learning and decision-making are still poorly understood; the need to seek that new understanding before we can develop more effective approaches to information literacy teaching or information service delivery; the need for more rigorous and more user-focussed methods of examining user-information interactions; a need for more interconnections between research and practice. A second *i<sup>3</sup>* conference will take place in 2009, again with an aim of understanding the lessons that might be learned by a more holistic approach to information interactions.