Users’ information seeking and their use of information retrieval and digital library technologies do not happen in isolation: they are always embedded in the context of wider activities. These activities motivate their search activity and use of technology, and can vary in enormously in nature and scale. Understanding the relationships between digital libraries and these contextual activities is key to meeting the needs of users. However, relatively little work has been done which brings together the relevant areas of research (Kuhlthau, 2005).

This special issue originated from a JCDL 2006 workshop on the same theme, which brought together a diverse collection of digital library researchers and professionals. Out of the workshop discussion came a sense that the contextualisation of digital libraries faced a separation between user- and technology-focused research which was in danger of missing the huge opportunities each has to offer the other (Blandford & Gow, 2006). Participants noted a wide variety of other challenges, including a need for interoperability, evaluation and applicable theory, and the possibilities of user collaboration and content-generation.

However, as digital libraries are brought into use in an ever increasing variety of contexts, researchers are building up a better picture of the commonalities across and key differences between these applications, in terms of useful guiding theories, effective technical solutions and appropriate usability methods. The papers in this special issue are an important contribution to this growing body of knowledge. They cover a wide range of users and contexts – although, as information seekers par excellence, scholars are well represented, with contributions addressing academic reading, writing, publication awareness and information seeking by academic lawyers. Beyond academia, we take in history education and a folk music library.

Reading, annotating and writing are core activities often concurrent with information seeking. Twidale, Gruzd and Nichols’s paper “Writing in the library: exploring the tighter integration of digital library use” explores the design space of integrated writing and ambient search tools for scholars. A rapid prototyping approach to developing and evaluating their PIRA system allowed them to home in on a design suitable for a more detailed user study focusing on search and document logs. Qayyum’s paper “Capturing the online academic reading process” reports on a study of Information Studies graduate students’ online reading, annotating and sharing of documents. By using an analysis of participants’ screen logs to inform their individual semi-structured interviews he was able to make detailed design recommendations for technologies that support a shared reading experience for students. These first two paper’s demonstrate the role that logging can play in understanding concrete activities like annotating and writing.

“Design and evaluation of awareness mechanisms in CiteSeer” by Farooq, Ganoe, Carroll, Councill and Giles takes as a starting point a popular and established information resource and discusses three user studies that contributed to the design of RSS feeds for its audience of computer and information science scholars. The cumulative evaluation involves requirements elicitation, prototype evaluation and finally a naturalistic study with the feeds supporting a collaborative task, making a convincing case for their design recommendations. In contrast to this strongly focused strategy, Makri, Blandford and Cox’s paper “Investigating the information-seeking behaviour of academic lawyers: From Ellis’s model to design” takes a broader look at
legal information seeking behaviour across a range of resources. As a result they employ the more open-ended methods of contextual enquiry and grounded theory, and they rely on – and extend – Ellis’s model of information seeking to support the journey from observation to design recommendations.

There are a multitude of applications and contextual activities to be explored outside academia, and Pattuelli’s paper on “Teacher’s perspectives and contextual dimensions to guide the design of N.C. history learning objects and ontology” discusses support for high and middle school history teachers accessing digital materials for use in the classroom. User studies, including teacher workshops, allowed the contextual activities to inform the design of the DocSouth digital library, and led to the ongoing development of a domain ontology to better support the teacher’s information seeking. The final paper – “A study of the information needs of the users of a folk music library and the implications for the design of a digital library system” by Inskip, Butterworth and MacFarlane – examines the diverse users and activities in a small specialist library and its digital counterpart, using Nicholas’s framework to guide the analysis of semi-structured interviews towards design requirements. This work highlights the extent to which social networks, including librarians, can be tied in with the library’s use. These final two papers clearly illustrate the diverse contexts and activities in which digital libraries are now being used.

We would like to thank the authors who submitted papers and the referees for their valuable contributions to this special issue. We believe that the themes represented in these six papers signify an important developing research direction in information processing and management: that of relating information retrieval and information seeking to the broader information working context.

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