

Developing a Collaborative Sandbox for Digital Library Research

Organizer: Xia Lin, Drexel University

Presenters:

Daqing He, University of Pittsburgh

Lorri Mon, Florida State University

Jeffrey Pomerantz, University of North Carolina

Haozhen Zhao, Drexel University

ABSTRACT

The challenges and issues around digital libraries research are of great interest to the iSchool community. Questions such as how to best understand the needs of digital library users, how to identify and develop appropriate information services and resources, how to develop and maintain a community of digital library users, and how to measure the impact of digital libraries to the lives of users, are all central to iSchool's research and education.

As a field of study, digital libraries emphasizes both theories and practice. For many years, iSchools are often focusing more on theories than on practice; an exception is the Internet Public Library (IPL), which was developed originally at the University of Michigan and now is managed and developed at the Drexel University and supported by the IPL Consortium. IPL has been a popular public library with real users from all of the world (the IPL website receives over one million unique visitors per month). It is a digital library designed, implemented and managed by iSchool students and volunteers. It serves as a good example of a digital library environment where students can practice their knowledge and skills.

Looking forward, IPL represents both challenges and opportunities for the iSchool community. Ten years ago, IPL was developed with the advanced ideas and technologies at that time. As the theories and technologies of digital libraries advance, IPL needs to be further developed. Recently, IPL has just went through a major re-design and upgrade, with a new brand name IPL2 ([://www.ipl.org](http://www.ipl.org)). The new design utilizes XML technology and Fedora repository software. It enhances the IPL collections through the merger of LII and IPL data.

To ensure that the development and re-development of IPL is sustainable, we consider it essential to develop IPL as both a practical digital library and a research laboratory. We need to learn from IPL practice to enrich our understanding of digital libraries; we need also to use IPL as a sandbox to develop prototypes and test new ideas to further theories. In other words, IPL should become a collaborative research environment that will help us complete the circle of theories, practice, and research.

We envision the IPL can become

- both a learning and research environment and an operational digital library.
- easy-to-use systems with significant data and digital collections for various digital library activities.
- a platform and a "sandbox" with rich APIs and visual modules where students and faculty can create mashups and test new ideas and new technologies.
- a demonstration space to showcase how research, learning and collaboration take place in a digital space, spanning across time and geographic location.

The goal of this panel is to discuss the challenges and opportunities and explore the ideas and paths that will help us reach this vision. The panel will start with an overview of IPL2 new design and implementation, and then each of the presenters will give a brief description of current research he/she is doing with IPL2. The discussion will then focus on brainstorming how we develop IPL2 to make it a sandbox and a collaborative space for our research and education in digital libraries. Questions to be discussed include: what collections should we develop? What schema and architecture should we adopt and implement? How should we implement the metadata? What APIs are needed for prototype development and testing? How best to collect reference questions and answers for research purposes? How do we collect and evaluate user's needs? How should we develop and grow the user community as well as the researcher community around IPL2? how open and interactive should the digital library be? How much should it allow users to interact with, add to, rate, create, and remix the resources? These and many related questions will open up the dialog between presenters and audiences and we expect the audience to participate actively and contribute their ideas of how to advance IPL2 to become a collaborative research environment for the iSchool community.