Book Reviews

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Data Management for Libraries: A LITA Guide. By Laura Krier and Carly A. Strasser. Chicago: ALA TechSource, 2014. 112 p. $58 paperback (ISBN: 978-1-55570-969-3).

Data Management for Libraries provides a brief guide to data management for librarians who are novices in this emerging area. The book is organized into eight chapters, with three appendixes.

Chapter 1 provides a basic overview of data, data management, and the data curation lifecycle. Chapter 2 a variety of considerations for starting a new service: developing a new service as a pilot project; collaborating with other colleagues within both the library and the institution during the entire data lifecycle; training scholars to better manage their data; and staffing, particularly when that staffing requires that existing librarians take on responsibilities without relinquishing others. The general information regarding starting a new service includes several considerations that are worthwhile for initiating any new service. Particular to data management are planning for data preservation as a part of the service, and also data training for researchers that may not have experience in data management.

Chapter 3 is devoted to an overview of data management plans. Librarians are well-poised to assist researchers in this particular capacity, especially since many researchers currently lack the skills to write a data management plan. Some researchers may need extra motivation to create a data management plan, and this chapter provides useful suggestions to help researchers find value in writing a plan. This chapter also provides an overview of the components of a data management plan, including: description of data/metadata; security, ethics and intellectual property; plans for data access, sharing and reuse; plans for short-term management and storage; plans for long-term management/storage; resources needed to implement the plan. The chapter offers several questions to generate the readers' ideas of what may need to be considered in a data management plan, and concludes with some advice for complying with funder requirements.

Chapter 4 discusses the data management interview, which is similar to a reference interview. The chapter summarizes previous research into data curation profiles and personas of researchers that may require assistance with data management. It also stresses the importance of involving liaison/reference librarians in data management since they are likely the colleagues that already have strong relationships with researchers at the institution. An important role for librarians may be to raise components of data management when interviewing researchers. Like the reference interview, data management interviews require active listening.

Chapters 5 and 6 address facets of data management wherein librarians clearly lead their institutions regarding expertise: metadata and preservation. In chapter five, the authors provide an overview of the three different types of metadata that can describe a dataset: descriptive, administrative, and structural. This basic review is most useful for librarians with relatively little familiarity with metadata concepts, standards, and schemas. Chapter six describes the difference between data storage, data archiving, and data preservation, and provides a summary of repository types. The preservation process includes data appraisal, repository selection, and document and deposit data. Certain disciplines have domain repositories that facilitate data preservation. Institutional repositories are adept at handling open access goals. Other options are also considered, such as server or cloud-based storage. Data preservation also has costs, particularly for personnel and data curation.

Chapter seven provides a discussion of data access. Data access can run the gamut between completely closed data (confidential or requiring top-level security) to completely open data (freely available in the public domain for anyone's use). Open data also facilitates reproducibility of data, and may help credibility concerns. Tips on crafting an institutional data policy are provided. The role of data identifiers is addressed, as well as a summary of the benefits of access: ensures reproducibility of results, credibility of researcher and results (and institutions, funders), acceleration of research speed, and funders get a maximum gain for their investment. It is also easier to identify/generate new research questions.

The guide concludes with a brief chapter on data governance issues. The chapter provides insights into the various stakeholders for data governance, including the researcher, their institution, the funding organization, the academic publishing community, and the public. The chapter touches on the complexity of copyright law regarding data sets. Mechanisms to share rights such as contracts, licenses and waivers are discussed, along with privacy and confidentiality issues.

Three practical, useful appendixes are included in the guide: "Appendix A: List of Resources to Consult

When Establishing an Institutional Repository"; "Appendix B: Sample Job Descriptions for Data Librarian Positions"; and "Appendix C: Sample Data Management Plans."

Data Management for Libraries is extremely well organized and provides many useful suggestions in its overview of data management from a library perspective. Krier and Strasser are careful not to proscribe what a data services department must include in a library, which is a strength of the guide. The guide coaches the reader to carefully tailor data management to the needs of a particular institution. Libraries that may be initiating a data services department would do well to consult this title when considering data management.—*Betsy Appleton (eapplet1@gmu.edu), George Mason University, Fairfax, Virginia*

Exploring Digital Libraries: Foundations, Practice, Prospects. By Karen Calhoun. Chicago: ALA Neal-Schuman, 2014. 352 p. $95 softcover (ISBN 978-1-55570-985-3).

The back cover of Calhoun's book *Exploring Digital Libraries: Foundations, Practice, and Prospects* declares it "a landmark text on digital libraries for students of LIS, educators and practicing information professionals throughout the world." It also states that it provides "an authoritative and in-depth treatment of the digital library arena, from the field's emergence to current topics and future prospects." Calhoun is a prolific and well-respected author and lecturer on the subject of digital libraries, and is definitely someone worthy of earning such accolades.

The book consists of two main themes. The first is a broad, international overview of the past twenty-plus years of digital libraries, while the second concerns the social roles digital libraries play in relationship to their online communities. Chapter 1, "Emergence and Definitions of Digital Libraries," covers the first decade of

this brave new world. The World Wide Web had been born, costs associated with computing had become much more affordable, and the National Science Foundation assembled a series of workshops on how to make digital libraries a reality. Projects such as the eLib Programme in the UK and the Digital Library Initiatives (DLI-1 and DLI-2) in the US, plus Project Gutenberg and the Internet Archive, gave a taste of what was to come. Calhoun also uses this chapter to establish the definition of digital libraries upon which she bases the rest of the book. In her eyes, digital libraries are both a multidisciplinary field of research and practice, and the systems and services that support the advancement of knowledge and culture; contain managed collections of digital content; and often utilize architecture from the computer and information science/library field (e.g., repository, resource identifiers, user interface).

In chapter 2, "Outcomes of Digital Libraries' First Decade," Calhoun identifies several key results from this initial period. These include a new field of research and practice, the transformation of scholarly communication processes, open access, digitization and digital preservation, metadata and its standards, and actual working digital libraries and the communities they serve. Each outcome is discussed in detail, and introduces such topics as *D-Lib Magazine*, PageRank (Google's forerunner), the Open Archives Initiative (OAI), JSTOR (short for Journal Storage), Dublin Core, the Library of Congress' American Memory, and the British Library Online Newspaper Archive. Chapter 3, "Key Themes and Challenges in Digital Libraries," introduces the concept map that Calhoun created based on the major themes from the digital library literature of the decade 2002–12. The map consists of a collection of keywords plotted in a continuum of themes and topics arranged from "collections" to "communities" (x-axis) and from

"technology" to "social and economic aspects" (y-axis). The remainder of the book is based on both this map and the four challenges that she has identified to building collections and communities for digital libraries: interoperability (providing uniform access for users to diverse information from various systems), community engagement, intellectual property rights, and sustainability.

Chapter 4, "Digital Library Collections: Repositories," begins with a look at traditional library collections and collection development in light of the web. It provides a close examination of digital repositories, including content usage and discovery (e.g., Google Scholar), the application of repository software (e.g., DSpace, Fedora), and web services such as XML (Extensible Markup Language), and concludes with examples of next-generation repositories such as Drupal and Scholar's Workbench. Chapter 5, "Hybrid Libraries," wraps up the book's first theme by examining the interaction between library users and hybrid libraries (collections of non-digital, digitized, and born-digital materials). Calhoun discusses the growth of e-books, the importance of special collections and archives, the emergence of digitized research library collections (e.g., Europeana, HathiTrust) and discovery services (e.g., portals), and concludes with licensing, e-resource management, remote access, and finally the web visibility of hybrid libraries.

An examination of the book's second theme begins with chapter 6, "Social Roles of Digital Libraries." Calhoun considers the value of libraries to their communities, both past and present, and uses them as a framework to describe the social role of their digital counterparts. She emphasizes five key areas: to support the free flow of ideas, to empower individuals and reduce what is known as the digital divide (the gap between those with and those without access to digital