
In today's information world it is difficult to keep up with every new resource or service that one can potentially offer to users. This is especially the case when dealing with engineers, because they use a multitude of information from various disciplines in numerous formats, and they have a range of information literacy skills. One can put one's mind at ease, at least for a little while, with Engineering Libraries: Building Collections and Delivering Services, because this book covers a topic that is relevant for any position within a library or information center that provides information to rising engineers, faculty, and researchers. This book contains a compilation of articles that were written by librarians from the corporate and academic communities. Even though most of the articles were written by people in academia, the topics of discussion can apply to all library settings that deal with engineering.

This book contains an introduction by the editors, includes and index, and is divided into four sections: resources, digital and virtual libraries, information competencies, and management. Within each of the four sections there is a range of articles. Each of the articles has an extensive bibliography for further exploration on the topics.

The resource section covers information from across the spectrum, ranging from resources for secondary education to the production and suppliers of grey literature. Whether one is doing outreach to local schools or searching for technical reports about the latest research sponsored by the government, the resource section has valuable information. The article by Beth L. Brin, "Building a Library Collection to Support New Engineering Programs," supplies the reader with a step-by-step guide on how to build a collection to support a program. Brin provides strategies and a list of guides and publishers for selecting current and retrospective monographs, serials, and other materials, such as technical reports and standards.

A highlight from the articles that deal with the topic of digital and virtual libraries is "Virtual Engineering Libraries," by Jill H. Powell. Powell provides the reader with a comparison of ten virtual libraries or Web sites. She uses Ackermann and Hartman's definition of virtual libraries (as in WWW Virtual Library), namely "directories on the Web that contain collections of resources that librarians have carefully chosen, annotated, and organized in a logical way" (107). The virtual libraries and Web sites compared were either specific to engineering (such as the Edinburgh Engineering Virtual Library (EEVL)—or general in nature (such as Yahoo! and Google). For each of the ten, the author provides some background information on the virtual library or Web site, its strengths, and how it compared to the others when looking for twenty-five resources the author selected.

Information literacy has been the hot topic for quite a while. Therefore, there have been lots of articles and standards written about this topic including "Information Literacy Competency Standards for Higher Education," which was developed by the Association of College and Research Libraries. This section could have included more information on issues such as how to assess if someone is information literate or how to make sure instructional sections develop information-literate users.

The last section of the book deals with management. Some of the topics that are discussed are how technology and the economy have an effect on the library, making sure that the services are based on users' needs, and how to make sure additional funding is available, if needed. The article "Opportunities for Creativity: Fundraising for Engineering and Science Libraries," by Joanne V. Lerud and Lisa G. Dunn, is timely. Let's face it: the economy has seen better days. There have been mergers and layoffs in the business world. State budgets across the nation have been hit hard. These factors and more have all had an effect on libraries. Likewise, we have seen library budgets shrink tremendously, together with layoffs and even closing of libraries. It seems especially important to look into alternative ways to provide resources and services. Lerud and Dunn present a variety of ways to seek funding, such as letters that solicit support or events that are held annually, and strategies
for success.

Although these articles were all simultaneously published in the journal *Science and Technology Libraries*, having them also available as a monograph with an index for easy reference is valuable. Several of the articles provide concise background information, so that the reader can better understand the current issues. The information provided is appropriate for those new to the profession as well as for the veterans. The editors summarize it best by stating, “This collection of papers highlights some of the issues, resources, tools, and techniques that will be necessary to meet the challenges of engineering librarianship in the future.”

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Library catalogs are ambiguous in essence. What do they describe at all? What is the precise nature of the “cell units” of which such “organisms” consist? What is the precise nature of the “sinews” that bind those cell units together?

The basic cell of a catalog is the bibliographic record; the basic sinews that bind them together and give them meaning as a whole are bibliographic relationships. But the overall ambiguity of library catalogs results from the very ambiguity of basic cells themselves: what is it that a bibliographic record describes? Any skilled cataloger will immediately reply: “A publication,” that is, a product—a *physical* product. Or, to put it more accurately, a set of features common to a given set of physical products.

But what about the immaterial content of bibliographic products? Librarians cannot ignore that fundamental aspect, and they strive to account for something like “content.” Here begins the ambiguity. Catalogers strive to stuff into the tiny space of bibliographic records information that relates either to physical products (i.e., *publications*) or to intellectual products (i.e., *works*). And yet, they keep to the equation:

\[ 1 \text{ distinct [physical] publication} = 1 \text{ bibliographic record} \]

Hence those huge lists of hits, if you are unfortunate enough to search for a heading such as “Shakespeare” in a library catalog.

Theoreticians in library science—and practitioners as well—have therefore been investigating the possible helpfulness of *works* in information organization (and Seymour Lubetzky’s influence proved instrumental in that field). In this regard, Richard P. Smiraglia’s *Works as Entities for Information Retrieval* is timely, welcome, and immensely valuable. But Smiraglia’s concerns go far beyond just the problem of library catalogs—he is also fascinated by the semiotic value of works in those two tightly interrelated systems, human society and individual mind. In the present collection he therefore called for contributors in either aspect of the *work entity* research.

The issue of huge hits lists is addressed by Alyson Carlyle and Joel Summerlin’s paper “Transforming Catalog Displays: Record Clustering for Works of Fiction.” This paper reports on a study of the feasibility of automatic creation of record clusters “to condense and better organize long catalog displays, making retrieval sets more intelligible to users” (14). It seems that this research is closely related to the FictionFinder prototype that is currently being developed by the OCLC Research Team, and reports on FictionFinder may constitute a good complementary reading.

More specific contributions deal with peculiar categories of materials, namely representations of scientific models, cartographic materials, video works, television series, digital editions, and multimedia CD-ROMs. A wide range of different types of materials is therefore covered. But more interestingly, each of these authors poses and discusses, beyond the mere physical peculiarities of the various categories of materials they address, more profound theoretical problems than just “How shall I catalog that?”

For example, in “Scientific Models as Works,” Anita S. Coleman poses the problem of “of-ness” and “about-ness” relationships. Typically, catalogers and indexers will tend to regard a scientific treatise or paper that contains a representation of a scientific model as a *textual work* that was written about that scientific model. She convincingly argues that such textual works are the scientific model itself or, to put it more accurately, that they have an “of-ness” rather than an “about-ness” relationship to it. Practically, that changes many things in the way they should be cataloged.

Similarly, in “Lucy Is ‘Enceinte’: The Power of an Action in Defining a Work,” Andrea Leigh does not just handle the problem of “how to catalog television series on videocassettes,” she also investigates the fundamental difference between performed works and non-performed works, what makes the former so specific, and the inadequacy of current cataloging codes.

Other papers deal with the second aspect of the *work entity* research, that is, Smiraglia’s favorite theme of works as *signs*.

Thus, Frances Morrissey, in “Introduction to a Semiotic of Scientific Meaning, and Its Implications for Access to Scientific Works on the Web,” investigates “formal scientific communication . . . through scientific works of accepted genre” (67). Her analysis is impressive and surely correct, but unless the reader has a solid knowledge of semiotics, the paper is