

Carroll, A. J., & Borycz, J. (2026). *Essentials of STEM Librarianship*, Chicago: ALA Neal-Schuman. 237 pp. ISBN: 979-8-89255-584-5. Paperback. \$64.99.

Dr. Lindsay Zack, Louisiana Tech University



Essentials of STEM Librarianship by Alexander J. Carroll and Joshua Borycz is a practical guide for new and experienced librarians. Although the focus is primarily on issues pertaining to STEM librarians, much of the information is of general interest and could be universally applicable to any academic librarian, regardless of subject area. Both authors are currently librarians at Vanderbilt University and have years of combined experience in STEM librarianship, science, and data management.

The book is broken into three parts, each of which comprises four or five chapters: Part I: STEM and the American Higher Education Environment; Part II: Skills and Knowledge for STEM Librarians; and Part III: Designing Successful Librarian Programs. The parts and chapters within them do not need to be read in any particular order, and the authors encourage readers to jump around as needed. The book also includes a forward by Carol Tenopir, an introduction explaining the book's organization, an appendix on lesson-planning, and an index. A chapter summary and list of references (notes) is provided at the end of each chapter.

Part I covers a variety of topics, ranging from challenges facing STEM librarians to the history/philosophy of science and administrative structures in academia. While the early chapters may be an interesting read, not all of it is particularly useful from a

practical standpoint. Someone new to academia would likely benefit from reading Ch. 4, “STEM Personas: Researchers, Educators, and Students,” and Ch. 5, “STEM Personas: Leaders and Administrators,” which clearly explain the roles of different people, from students to administrators, within a university’s hierarchy. By going role-by-role, the authors focus on the responsibilities and interests of each group and suggest ways a librarian can build meaningful relationships with them based on their specific needs.

Part II (Ch. 6-9) is arguably the strongest section of the book and could be returned to for reference purposes. For example, Ch. 6, “Finding Information and Citing Sources,” includes tables and lists of indexes, databases, and other discovery tools. It then transitions into basic searching and offers advice on how to approach citations with students. Rather than teaching *how* to cite, the authors suggest it is more important for students to understand *why*. Part of this argument is based on the ubiquity of citation management software, so it is a little disappointing that the book does not include a deeper dive into citation managers.

Ch. 7, “Reading Literature and Sharing Results,” and Ch. 8, “Managing Data and Evaluating Research,” are heavy with tables and examples that can be used when working with students and faculty. Ch.7 offers strategies for reading scientific papers before applying those lessons to writing and presenting research. Of course, this same information is available in other guides, books, papers, blogs, etc.; however, having it compiled in one place makes this a valuable timesaver. Ch. 8 addresses a slightly newer and nontraditional responsibility that a STEM librarian might encounter: helping students and faculty manage data. Understanding that this topic will be largely unfamiliar to

librarians without a science background, the authors provide a lengthy explanation of why this service is needed before providing actionable steps a librarian can take to aid faculty and students. Metrics for evaluating research are also discussed in this chapter, although it would have made more sense to put this content in a chapter of its own.

A modern book on any aspect of librarianship today would be incomplete without mention of artificial intelligence, and Ch. 9 thus provides a brief overview of generative AI and how it works. The bulk of the discussion is on ChatGPT, which is puzzling given the push for AI integration into library databases, research tools, etc. Some tools are mentioned in passing, but there is no substantial discussion about what that could mean for librarians and students, how to use these tools effectively, ethical concerns, and so on. The authors do, however, devote a good amount of space in the chapter to how to approach AI from an information literacy perspective. That section could easily be used as a starter for library one-shots and instructional material.

Part III focuses on bigger picture ideas, like supporting teaching and research missions (Ch. 10-11), relationship building (Ch. 12), and sustainable liaison programs (Ch. 13). Although there is a flavor of STEM in these chapters, they seem a little broader than other sections of the book. For example, Ch. 10 covers basic information about teaching, such as assessment strategies and assignment design. It also delves into tying instruction to programmatic goals and curricula. Although there are STEM-related examples, the advice is generic enough that it can be applied to any field. Ch. 11 seems like a continuation of the first part of Ch. 8, with discussion of a lab-integrated librarian model, in which a librarian is embedded in a research group to provide assistance with data

management, contextual instruction, and other information needs. However, this model would certainly be difficult, even impossible, to implement on a large scale. The authors do offer some advice for implementing this model, but the success of the program hinges on several factors, some of which may be out of an individual librarian's control.

The last two chapters are only superficially related to STEM. In Ch. 12, a 4-step approach to building relationships with stakeholders is presented. The authors point out that, although much emphasis these days is placed on STEM librarians learning new skills, upskilling/reskilling is not as important as building strong relationships through engagement, communication, preparation, and follow-through. This chapter is a natural complement to Chs. 4 and 5 from earlier in the book.

Ch. 13 starts as a critique of traditional liaison librarian programs, emphasizing issues likely to arise, such as lack of accountability, territoriality, etc. Additionally, the chapter details the drawbacks of a single point-of-contact between the library and an academic department and consistency issues from liaison to liaison. The solution proposed is a move to a team-based liaison model, in which a team of liaisons works collaboratively. The advantages of this approach include an ability to sustain long-term relationships with departments, spread the workload more equitably, and offer more consistent services. Although this may be a workable solution for larger libraries and universities, it might not be doable for libraries with limited staffing and resources.

Overall, *Essentials of STEM Librarianship* is a thoughtful exploration of (STEM) librarianship today. The authors' expertise and experience are clearly present throughout the text. Advice and suggestions offered are practical, actionable, and specific.

Information is presented in manageable pieces and often in multiple formats (text, tables, figures). In fact, the 12 figures and 33 tables spread throughout the book clarifying and/or summarizing the text may be the highlight of the volume. Hopefully, the title and seeming emphasis on *STEM* will not deter librarians in other specialties, as this book could be a useful reference for a librarian in any subject area.