

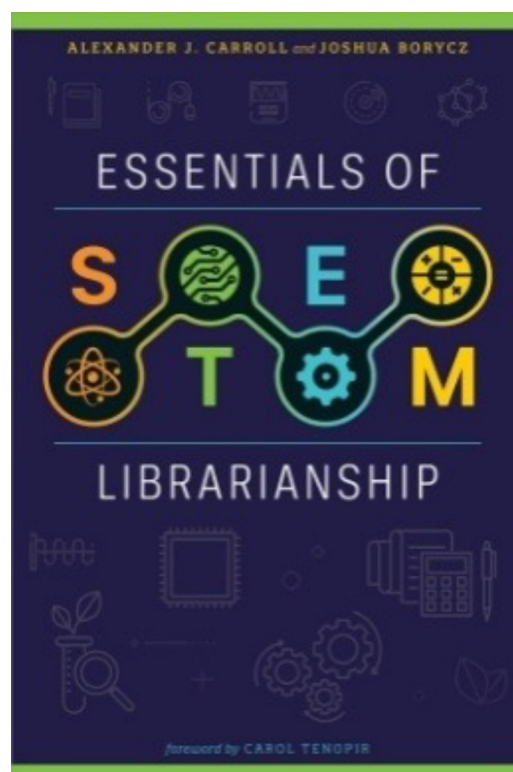
Essentials of STEM Librarianship, Alexander J. Carroll and Joshua Borycz, ALA Neal-Schuman, 2025. 264pp. Softcover, \$64.99. 9798892555845.



Essentials of STEM Librarianship seeks to answer two questions: What is the purpose of a STEM librarian when everything appears to be available online; and how can modern STEM librarians effectively engage with their departments? As the title of this book suggests, Carroll and Borycz offer an overview of what they consider to be the fundamentals of STEM librarianship. Arguing that librarians should be more aware of—and involved in—the entire research lifecycle, the authors provide information on the higher education landscape, skills, and knowledge they consider fundamental, as well as strategies for supporting STEM departments. Organized in a clear three-part structure, this book is an excellent starting point for anyone interested in or beginning a career as a science librarian at a large, STEM-research-heavy academic institution that employs many science subject liaisons, such as those with a R1 Carnegie Classification.

Part I, “STEM and the American Higher Education Environment,” includes chapters on how STEM education interacts with academic libraries and in what ways science is different from other academic disciplines. This section provides a unique context to better understand how large research institutions are organized and how scientists approach their work differently from other academic disciplines. Chapters 4 and 5, the most useful in the book, describe the various “personas” of campus stakeholders, such as research faculty or deans. Considering the different information each stakeholder group might be interested in or motivated by suggests how to interact with them. While basic, these chapters are a highlight of the book and introduce the important partners that new librarians may be interacting with to build stronger relationships.

Part II introduces necessary skills and knowledge for aspiring STEM librarians. This section covers the bulk of what novice and experience STEM librarians may want to know. The four chapters in this section cover information-seeking behavior of various user groups, the major STEM databases, how science is communicated, and the methods of managing data. Chapter 8, “Managing Data and Evaluating Research,” was especially interesting as the authors anticipate an increasing role for librarians in research data management, as well as increasing inclusion within the broader research lifecycle of large research enterprises. The authors make a compelling argument for the addition of research data management skills to a STEM librarian’s toolbox. A chapter on artificial intelligence may also tempt experienced academic science librarians who are interested in learning more about the growing field and how to apply it to their own work.



Part III is about the design and structure of liaison librarian programs. Chapters include how to support a university's teaching and research mission, ways to manage relationships, and suggestions for designing liaison librarian programs. Although these chapters are interesting and possibly helpful to new librarians, the last chapter is confusingly aimed at administrators or supervisors rather than the previously assumed audience of new STEM librarians. Some suggestions—such as curriculum mapping and building relationships by being responsive and reliable—are easily followed. Others—such as joining weekly research lab meetings and switching from a single subject liaison model to a team-based liaison model—may be difficult to implement without significant work embedding oneself into STEM departments and subject liaison cooperation. The need for broad library departmental buy-in may be why the authors aimed this final chapter at administrators, although the purpose is not explicitly stated.

The entire book does an excellent job acknowledging that higher education is changing and addressing how liaison librarian interactions with their departments likewise need to adapt. The authors provide suggestions and ideas based on their own experiences and what has worked for them. Many science librarians will appreciate the clear writing and helpful tables, as well as the summaries at the end of each chapter.

There are, however, a few flaws that limit the potential usefulness of this book for some readers. The most important is the underlying assumption that all institutions of higher education operate just like R1 Carnegie Classification STEM-focused research institutions. Another major challenge is a lack of definitions regarding what is and is not considered "STEM" for the purposes of this book. Additionally, neither STEAM (science, technology, engineering, art, math) nor STEMM (science, technology, engineering, math, medicine) is acknowledged as growing variations. As a result, readers looking to learn more about sciences that lean social-science heavy, such as environmental science, psychology, or health, may find relevant information missing. A short positionality statement acknowledging that the authors cover the traditional STEM world of science librarianship could have helped. A description of various science departments, their unique information-seeking behaviors, as well as how science librarians can most effectively engage with them, is also absent.

Although there are many citations included throughout the book, there are very few sources from any major science librarianship journals, no articles on the information-seeking behavior of science library users, and limited references about current science liaison librarian responsibilities (which are arguably out of date). The authors appear to draw from their own experiences, evident from their statement, "although many liaison librarians view research data as the domain of functional specialists, we believe these areas of expertise are as foundational for STEM liaison librarians as information retrieval or literature management" (p. 121). Support from research journals or perspectives from other librarians would provide further evidence of their arguments. While the skills and ideas presented in this book are interesting and helpful, some readers may find the suggestions to be secondary goals, rather than fundamental to their work. — *Clarissa M. Ihssen, Sciences Librarian American University*