

DATA LITERACY

IN ACADEMIC LIBRARIES

Teaching Critical Thinking
with Numbers

EDITED BY JULIA BAUDER

CONTENTS

INTRODUCTION vii

| | |
|---|---|
| 1 | Data Literacy in Undergraduate Education 1 |
| | Faculty Perspectives and Pedagogical Approaches |
| | Theresa Burress, Emily Z. Mann, Susan E. Montgomery, and Rachel Walton |
| 2 | Building Undergraduate Data Literacy through Faculty Development 23 |
| | Clarence Maybee, Guang Lin, Wei Zakharov, Chao Cai, Jason FitzSimmons, and Yixuan Sun |
| 3 | Beyond the Numbers 39 |
| | <i>Building a Data Information Literacy Program for Undergraduate Instruction</i> |
| | Veronica Arellano Douglas, Wenli Gao, Emma Fontenot, and Andrea Malone |
| 4 | The Barnard College Empirical Reasoning Center 59 |
| | <i>A Case Study in Developing a Service Model for Teaching Data Literacy across Disciplines</i> |
| | Alisa B. Rod, David F. Weiman, Fatima Koli, Anna Carlson, and Jennifer A. Green |
| 5 | Making the Most of a Data One-Shot with Mapping 77 |
| | <i>Multidisciplinary Data and Spatial Literacy</i> |
| | Kathryn M. Wissel |
| 6 | A Data Discovery Project 91 |
| | <i>Seeking Truth in a Post-Truth World</i> |
| | Allison Brungard and Langdon Smith |

| | | |
|----------|--|-----|
| 7 | More Data, Less Dewey | 105 |
| | Modernizing a For-Credit Library Course to Support Data and Algorithmic Literacy for Undergraduates Elizabeth Blackwood and Debra Hoffmann | |
| 8 | Data Literacy for Entrepreneurs | 123 |
| | Exploring the Integration of Pedagogy, Practice, and Research at MIT Nicholas Albaugh, Elizabeth Soergel, and Micah Altman | |
| 9 | Data Literacy and the Framework for Information Literacy | 139 |
| | Julia Bauder | |
| | ABOUT THE CONTRIBUTORS | 147 |
| | INDEX | 153 |