

Book Review

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A Research Primer for Technical Communication: Methods, Exemplars, and Analyses, 2nd Edition

—Reviewed by

ALAN HOUSER 

Index Terms—Research methods, statistics, surveys, usability testing.

The goals and purpose of *A Research Primer for Technical Communication* are appropriately summarized by the authors' words in the preface:

...this book contains essential information that you need to know to perform—or be an informed consumer of—research in the field of technical communication.

The book is appropriate for advanced undergraduate and graduate courses that cover research methods, and for academics and practitioners with interest in reading, using (to inform decision-making), or contributing to technical communication research.

A Research Primer for Technical Communication covers the research methodologies appropriate to advance the field of technical communication, and provides adequate depth to appropriately evaluate or conduct technical communication research. Throughout the book, the authors present practical considerations for designing and executing technical communication research.

Although the understanding and application of statistical measures are critical for evaluating research results, the book is accessible to readers without a statistics background. The text does not

generally present actual formulas for statistical measures. It does, however, provide plain-language descriptions of these statistical measures, their purpose in assessing research results, and the interpretation of their values. The book provides procedures for computing these statistics in Microsoft Excel and the open-source jamovi statistical software.

The authors do suggest consulting a statistics textbook if the reader requires more in-depth knowledge of statistical measures, or finds a need to apply other statistical tools to assess results.

The book is organized into two parts. Part I, Methods (Chapters 1–7), introduces the importance of technical communication research, describes the research process, and provides details for each of the five research methodologies discussed.

Chapter 1, Research: Why We Do It and Why We Read It, introduces research concepts, including categories of research, categories of research methods, and sources (sponsors or hosts) of research. The chapter also presents the major types of research publications, distinguishing between open publications, editor-regulated publications, and refereed journals, with the characteristics and degree of influence of each.

Chapter 2, The Research Phases and Getting Started, introduces the structure of a research paper: the Introduction, Methodology, Results, and Discussion (IMRAD) pattern, and explains each element of the pattern. The chapter addresses issues of research participation, including consent of subjects and Institutional Review Board (IRB) approval. Chapter 2 concludes by introducing Richard Halley's RAD concept, a recurring

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assessment mechanism throughout the book. RAD-conforming research is Replicable (the research is presented in sufficient detail that others can repeat the study), Aggregable (results are sufficiently supported that they can be combined with other results to build a body of data), and Data-supported (not based on impressions or subjective assessment). The authors use the RAD concept throughout the book, both in the discussion of each research method, and in assessing the validity of the exemplar research studies.

Chapters 3–7 each cover the five primary methods of technical communication research: the literature review, quantitative studies, qualitative studies, surveys, and usability studies. The authors present guidance and principles for designing studies using each method.

Each chapter in Part II, Exemplars and Analysis (Chapters 8–12), reprints a recent article in each of the five genres, and provides commentary on the authors' approaches, methodology, results, and conclusions. Each paper is of high quality, providing an example of effective research in each genre. Papers are sourced from *Technical Communication*, IEEE TRANSACTIONS ON PROFESSIONAL COMMUNICATION, *Technical Communication Quarterly*, and the *Journal of Usability Studies*.

Throughout the book, the authors provide motivating exercises. A single appendix covers citation styles. The book includes an index of

adequate detail for the topics and methods covered in the text.

A Research Primer for Technical Communication was first published in 2008 (the original edition was authored by Michael A. Hughes and George F. Hayhoe). Chapters 1–6 of the 2nd edition include minor organizational changes and minor additions to bring the text up to date with current tools and practices. For example, the 2nd edition mentions Google Scholar as a research tool and provides a mini-tutorial on using the jamovi open-source statistical software. The 2nd edition also adds a RAD assessment to the explanation of each research methodology, and to the analysis of each exemplar.

All exemplars are new in the 2nd edition. The 2nd edition includes a new chapter on usability studies (Chapter 7, Conducting Usability Studies), and new usability study exemplar (Chapter 12, Analyzing a Report on the Results of a Usability Study).

A Research Primer for Technical Communication offers a highly readable, nearly conversational style; the authors address the reader directly in the second person. The authors motivate every concept with an example, descriptive metaphor, or analogy. The text is sufficiently readable, approachable, informative, and enlightening to inform readers and evaluators of technical communication research. It will also inform and inspire a new generation of technical communication researchers.