**Losee, Robert M., Jr., & Wormley, Karen A.** ***Research and Evaluation for Information Professionals***. San Diego, CA: Academic Press, 1993. 231 pp. $45.00 (ISBN 0-12-455770-8).

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Whether teaching research methods or writing about the subject, it is hard to know where to begin and in what sequence things should be offered. Students seem to want to know everything at once. The sequence provided by this book makes considerable sense, especially considering the scope of coverage.

The authors begin with a discussion of why people do research in the first place, including a brief overview of the history and philosophy of science. This is followed by a look at the sociology of knowledge growth, a section on bibliometrics and a refreshing reflection on ethics. The next major portion of the book is devoted to a necessarily eclectic and superficial examination of both traditional and modern information processing. It is also occasionally misleading. Optical storage devices, for example, do not belong in the section on "Magnetic Storage," and disks provide *direct* rather than "random" access.

Having established a professional *raison d'être*, the authors go on to the subject of choosing a topic and making a proposal. Only then do they proceed to the nitty gritty of how to do research, followed in due course by tips on how to make both written and oral presentations of the results.

The adjacent sections entitled "Politics and Theory" and "Feyerabend Against Method" (p. 20) probably should have been omitted. Their inclusion merely provides fodder for those who think that all ideas have equal merit. Moreover, one has to wait until p. 200 to discover just how much mischief can be caused by the injection of political or other ideological beliefs into the research process. It may be true that we cannot be totally objective, but that does not mean we should not try. Ever since Gödel's proof, we have known that even mathematics is on slippery ground, but that does not paralyze us. If all ideas had equal merit, we would try to fly brooms or practice witchcraft instead of medicine.

In any case, the entire section on philosophy may be too esoteric for many of today's young readers, who are more likely to learn inductive and deductive logic from *Zen and the Art of Motorcycle Maintenance* than from the work of Karl Popper. Moreover, there are perils in the sections dealing with theories, hypotheses, and seeking truth. One does not normally speak of "proving" theories (except, perhaps, at cocktail parties); instead, one speaks of finding support for various hypotheses, which, if consistent and congruent, lend support to a more general theory. Mathematicians prove *theorems*; scientists find support for *theories*.

Qualitative research is found in the section called "Field Research" and is identified with "participant observation" and "observational research." This section, like several others, also contains instruction on ethics. In my opinion,

qualitative research correctly precedes the chapter on statistical analysis, reflecting the order followed in the sciences, where qualitative comes before quantitative analysis. Put simply, researchers in all fields need to know what they are talking about before they attempt to quantify anything.

While qualitative analysis may involve in-depth study of a few subjects, it need not preclude quantitative methods. Whenever researchers count something, they can use descriptive statistics that shed light on an investigation. And if there are at least two groups that invite comparison, they may be susceptible to inferential analysis using non-parametric statistics appropriate for nominal data. Among other things, this book shows how to collect data properly and to perform these and other analyses.

How much and what kind of statistics to include in a book on research methods is always a problem. If there is too little instruction, readers fail to get a feel for either theory or practice. If there is too much, it becomes a statistics book. The authors provide a good balance, but they might have tied inferential tests more closely to the principal types of data: nominal, ordinal, interval, and ratio. That might have permitted a stronger discussion of the relative power of these tests; i.e., why some are "better" than others, and why "weaker" tests sometimes must be chosen simply because of the nature of the data.

The technical presentations are generally good and understandable; however, opportunities for instruction are sometimes lost. For example, when presenting the standard error of the mean, one might discuss the precision of a sample—essentially a reciprocal relationship. Non-linear relationships are presented but with no indication of how to choose which might represent the best fit (e.g., by using computer software that provides $r^2$ values). Regression lines are discussed, but not the confidence levels above and below them.

But agreement on such matters may not be possible. The book represents something of an "omnibus" introductory approach: there is something for nearly everyone. While avoiding "cookbook" approaches, the authors offer cogent examples that readers generally will find accessible regardless of their backgrounds. Suitable as an introductory text, this book should also find use as a reference work for practitioners.

**McDonald, Joseph A., & Micikas, Lynda Basney.** ***Academic Libraries: The Dimensions of Their Effectiveness.*** Westport, CT: Greenwood Press, 1994. 208 pp. $49.95 (ISBN 0-313-27269-7).

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This is an interesting book on an interesting subject, academic library effectiveness. In an age where assessment and accountability have become such