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Book Review

e-Research: Methods, Strategies, and Issues

Authors: Terry Anderson and Heather Kanuka (2003). *e-Research: Methods, Strategies, and Issues*. 192 pages, soft cover. Boston, MA.: Allyn & Bacon. ISBN: 0 205 34382 1

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The book *e-Research: Methods, Strategies, and Issues* is a comprehensive introduction to Net-based research, covering all steps of a research project as well as different types of research. True to its title, it also deals with important issues of e-research, focussing especially on the issue of ethics.

According to the authors, *e-Research: Methods, Strategies, and Issues* is “a guide and reference for both experienced and novice researchers” who “have an interest in expanding their research skills by using the Internet . . . ” (p. xv). As an institutional researcher with 25 years’ experience of distance education research, I clearly belong to the first target group, and my review of the book necessarily reflects this fact. From where I stand, the book is primarily geared to the target group of (graduate) students and beginners, setting out basic research considerations and leading the reader step-by-step through different research scenarios.

The book is organized into 14 chapters, six of which deal with specific research methodologies (Chapters 7 through 12). The authors “have structured the chapters based on a model of academic research that we commonly use with senior undergraduates, masters, or doctoral projects and/ or these” (p.xv). Looking at the book for purposes of conducting this review, I did not follow the authors’ advice that, “*E-Research* need not be read sequentially; rather, you are invited to proceed directly to the section that most immediately meets your research needs” (p.xvi). If I had followed the authors’ suggestion and had used *e-Research: Methods, Strategies, and Issues* as a handbook, I might not have had the feeling of repetition and redundancy, which overcame me increasingly as I progressed through the text.

Before I discuss the book’s chapters, I wish to refer to the supplementary website located at www.e-research.ca. While I did not spend a lot of time exploring this website, I can say that it appears to be useful as it presents one-stop access to “chapter summaries and links to the sites, resources, and online papers referenced in the book” (p. xvi). It also contains an additional chapter on “Website Construction,” which was omitted from the published text due to space constraints. All the links I tried worked, and I am sure I will return to this resource whenever I need additional information on any of the topics covered in the book.

Chapter 1 “Introduction” lays the groundwork by defining “research” and “e-research,” and discussing the terminology to be used throughout the book. Here the authors “have settled on the use of the adjective *networked* and the noun *Net* (with a Capital) to describe this context [of networking]” (p. 13).

Chapter 2 “What is the Net?” provides information on the history and functions of the Internet, and deals with the uses of search engines and subject guides to find information, which are both useful and relevant.

Chapter 3 “Designing e-Research” rightly says that this task “will in most ways mirror the design process for non-Net-based research” (p. 29), typically including “the following:

- A research methodology paradigm
- The use of related and relevant literature
- The purpose and/ or objectives of the study
- A problem statement, research questions, or hypotheses
- An acknowledgement of limitations and a setting of delimitations
- A statement of the significance of the study. A plan for data collection and analysis
- A statement of how the study advances methods and procedures for data collection and analysis.” (p. 29-30)

Chapter 4 “The Literature Review Process in e-Research” is a basic introduction to the reasons for doing a literature review, the process of doing it, and the criteria for evaluating the literature. Principles covered in this chapter are the same as that would apply to any form of research, but e-research “does provide new tools and techniques to increase both the efficiency and effectiveness of the researcher” (p. 39). As in any research process, the literature review serves to identify relevant literature and to help focus the research question. Its quality is measured against “five basic elements that academic researchers require of information sources” (p. 40), all of which are affected by the Net.

- **Accessibility:** On the Net, literature is increasingly available with less expenditure of time and effort
- **Timeliness:** There is a proliferation of official and unofficial publications on the Web, and (preliminary) findings may be posted immediately without undergoing a review process. The danger is that there may be an illusion of currency if sites are not maintained and updated
- **Readability:** On the Net, online viewing preferences can be accommodated and multimedia formats can be introduced
- **Relevance:** On the one hand, it becomes easier and faster to locate texts through search engines; but on the other, it may become more difficult and challenging to assess the veracity and relevance of the information found on the Web

- **Authority:** In order to judge the reliability of the information turned up in the literature search, researchers “must be able to authenticate” their authority. This requires “a new set of critical evaluation skills” (p. 40-43)

The authors provide suggestions to “guarantee the reliability and credibility” of information retrieved without the benefit of peer or editorial review: “Hallmarks of what is consistently considered to be valuable, credible, and high-quality information that can be used when evaluating publications found on the Net are clustered into the categories of authority, accuracy, bias and objectivity, and coverage” (p. 43). Lastly, the chapter deals with finding formal and informal literature sources, and with the issue of “plagiarism and networked sources” (p. 51).

Chapter 5 “Ethics and the e-Researcher” deals extensively with the issue of ethical concerns in academic research generally, and with the way these “concerns are becoming increasingly multifarious in our post-modern society, which is defined by complexity, multiculturalism, and media saturation” (p. 57). The authors argue that, “a number of dilemmas, issues, and problems with respect to ethics... pertain to all types of research, but they have a tendency to acquire added and more complex twists when undertaken in an electronic format” (p. 56). This is held to be especially so “when applying e-research to study behaviour that takes place on the networks” (p. 59).

The chapter sets out clearly the challenges presented by different applications and details the “standing ethical guidelines and principles” of e-research (p. 59-60). Much room is given to the question of “obtaining consent from online participants” (p. 62-68), and sample letters and consent forms are provided together with suggestions on addressing potential participants and processing their answers. Also discussed are the “public versus private dilemma” and ways of “reducing the potential to harm,” followed by practical “tips for ethical e-research” (p. 68-71).

This chapter, as a whole, as well as the numerous references to ethics throughout the book, reflects more than any other, the Canadian origin of *e-Research: Methods, Strategies, and Issues*. The opening sentence “Researchers associated with academic institutions need to submit an ethics proposal prior to conducting their research” (p. 56) does not, for instance, apply to my own country, Germany. While we are also concerned with ethical research, and especially with issues of “data protection” (privacy and confidentiality), as academic researchers in Germany our research proposals are not vetted beforehand by bodies such as “institutional ethics review boards” (p. 56). To me, as a non-Canadian, the extent of this book’s concern with ethics seems somewhat excessive.

Chapter 6 “Collaborative e-Research” discusses ways in which research collaboration may be enhanced through the application of Net technologies. Since many research projects involve more than one researcher or geographically distributed research teams, they can profit from – and some are only possible with – the tools for communication and cooperation provided through the Net. These tools fall into five categories: 1) communication; 2) data and document sharing; 3) application sharing; 4) project management; and 5) community management. This chapter would be particularly useful to researchers who are new to the Web, or have not yet used it for collaborative purposes. The section on “collaboration tools in action: a failed example,” however, leaves me with the impression that, at least today, the benefits of using Net-based collaboration tools are largely offset by the time and effort needed to implement them, and to train and motivate all members of the research team(s) to use them effectively and continuously.

While these initial chapters deal with general research issues, Chapters 7 through 12 each deal with a specific research method. They are best seen as a research handbook or manual, consulted either for the purpose of choosing between different methodologies or for the purpose of carrying out a research project using a specific methodology. Taking each of these chapters on its own merit, they are well organized and clearly written, fully serving these purposes. Five of the chapters include sections with practical tips for doing the research under consideration. The chapters are:

Chapter 7 “Semi-Structured and Unstructured Interviews”

Chapter 8 “Focus Groups”

Chapter 9 “Net-Based Consensus Techniques”

Chapter 10 “Quantitative Data Gathering and Analysis on the Net”

Chapter 11 “Surveys”

Chapter 12 “Content Analysis of Online Documents”

With one exception these chapters strike me as introductory methodology texts, which are equally as valid for non-Net-based research. The fact that we are dealing with e-research is an added consideration, broadening the range of research instruments as well as confronting us with new methodological challenges. The exception, of course, is Chapter 10, which deals with the Net as the research problem as well as the research tool.

Chapter 13 “Net-Based Dissemination of e-Research Results” starts out by offering basic advice, which applies to any research, not only to e-research. The authors observe that the “dissemination phase of e-research is the climax of the research cycle, and it occurs when researchers share the results of their important research studies with the world” (p.184). This, of course, is true for any other form of research as are the reasons for publishing the results (p. 184-186), and the need for creating quality content (p. 187-188). Dissemination of results through peer-reviewed articles is not fundamentally different in the case of e-research, although considerations of the status of electronic journals may affect one’s choice of publication (p. 189-193). There are some channels for publishing research results, which are unique to the Net, although not confined to e-research. Findings may be disseminated through a website, through email lists or usenet groups, or through a virtual conference.

Chapter 14 “The Future of e-Research” concludes the book “by examining features of the Net and the components that are driving significant change. Through this examination of the driving components, we hope to illuminate a future path for e-researchers that will help in the selection of the best Net-based tools and in applying them to significant issues worthy of research” (p. 202-203). Four factors are named in this context:

1. **Volume**, which refers to activity and applications as well as to geography and to languages used on the Net (p. 203-204)
2. **Velocity**, which refers to the “raw speed and throughput capacity of the Net” (p. 204)

3. **Variety**, which refers to communication and interaction formats and ways to retrieve information (p. 205)
4. **Value**, which “is directly related to quality.” This in turn must overcome the present “chaotic organization of content,” and is “enhanced by “the increased communications capacity of the Web,” and “the capacity to disseminate results much more quickly and economically” (p. 205-207)

In conclusion, the authors are confident that “as e-researchers we have a tremendous opportunity to make a profound difference in the rapid evolution of network-enhanced research” (p. 207-208).

On balance I consider *e-Research: Methods, Strategies, and Issues* to be a well-written, easy-to-follow handbook which keeps its promise to show “students how to become active practitioners and informed consumers of Internet-based research, its tools, and its techniques. This text takes the learner through the complete research process. It is written in clear, non-technical language with educational research examples that illustrate how each component of the research process changes in a Net-enabled context” (back cover). In my opinion, the authors achieved their “goal in writing this book,” namely “to share our knowledge and experiences,” and provide “at least one good idea that makes your research easier, more productive, and more rewarding” (p. 208).

