

GARRISON, D. R., & ANDERSON, T. (2003). *E-Learning in the 21st century: A framework for research and practice*. London: Routledge Falmer (pp. 167).

In *E-Learning in the 21st Century*, Garrison and Anderson have provided an excellent resource covering the impact of eLearning on higher education and society. Intended for researchers, practitioners, and senior administrators who may be looking at implementing or reviewing eLearning in their institutions, this book has a sound research base and draws on the rich experience and enthusiasm of these two leaders in their field. In that respect I would also recommend this book as a text for graduate students who are working in the field of eLearning.

In their preface, Garrison and Anderson warn that eLearning not only provides enormous opportunities—it also provides correspondingly high risks for higher education. Their goal in this book is to examine the technological revolution in such a way that there is a clear framework for understanding the possibilities and applications for eLearning. Through their extensive research they are able to look behind the hype of these revolutionary technologies and not only address the pedagogical and organisational perspectives, but give practical models and exemplars of good practice as well.

The book is divided into two parts, initially looking at the conceptual framework around eLearning followed

by a more practical application of the framework with the focus on a wide range of learning activities conducted through online electronic means. The link between eLearning theory and the practice is one of the strengths of the book that I believe will set it apart from other publications in this area of distance education.

The authors' notion of eLearning as something driven by the needs of teachers and learners rather than the technology is most refreshing. This is not about solutions looking for problems to solve, but an emphasis on developing effective online teaching and learning cultures of inquiry. The authors are unashamedly enthusiastic about online learning and this positive energy comes through strongly in their writing.

Garrison and Anderson highlight the importance of developing a critical community of teachers and learners using a constructivist collaborative approach. They believe that facilitating, constructing, and validating understanding can develop capabilities that will lead to further learning. I liked the way they explore social presence, cognitive presence, and teacher presence with their optimistic view that "the role of the teacher will change—but for the better" (p. 65). This examination of teaching roles acknowledges its multifaceted nature and the need to be "a subject matter expert, an educational designer, a social facilitator, and a teacher" and how "the liberating frame of e-learning significantly alters

how these responsibilities are fulfilled" (p. 65). This book does not disappoint the reader who is keen to know more and gives clear, authoritative information about what we will all need to be aware of as eLearning administrators, researchers, and practitioners.

I found this book provides particularly useful insights into assessment and evaluation, with chapter nine offering a good general overview of the topic. Many people question how assessment for traditional learning is different to eLearning and this is an aspect that could well have been explored a little further. If there is in fact little or no difference, then maybe this needs to be made clearer, but the suggestion is that eLearning offers enhanced opportunities. The authors do highlight different modes of assessment provided by the online environment and this provides some models of good practice that teachers will find most useful.

In the area of assessment and evaluation, one important issue that Garrison and Anderson raise is the reliability and validity of the content analysis of online discussion. While a lot is written in the eLearning literature about the importance of assessment to encourage discussion participation, how this assessment takes place and the methods used for analysis are open to question. The methodological issues associated with the content analysis of online group discussion transcripts are explored in Appendix B, a paper written with Liam Rourke and Walter Archer. This paper examined nineteen different computer-mediated communication content studies and raised issues that clearly need to be addressed as part of the online assessment of class discussion participation.

If you are looking for a book that will give you a good theoretical justification for the development and teaching of online courses, then this book would be an excellent starter. It will show that eLearning is not just another learning technology; it has the potential to enable those working in higher education to transform their teaching and learning.

This is a book that should find wide acceptance from educators who are trying to meet the challenges of eLearning in their institutions.

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MOORE, M. G., & ANDERSON, W. G. (2003). *Handbook of distance education*. Mahwah, New Jersey: Lawrence Erlbaum Associates (pp. xxiii, 872).

This book has been sitting on my desk for a few weeks while I have been finding the time to write this review. During that time I have found myself dipping into it as a particular issue arose or when I have had to prepare a report for a meeting. So my initial thoughts are that it is useful to have a copy within easy reach. It is not a book that you will lose easily on your desk, as it is weighty (containing 872 pages divided into 7 parts with a total of 55 chapters) and in its dark grey cover with gold text it looks like an authoritative reference. I was more in danger of losing it to other people as they came into the office, took an interest, flicked through its pages, and wanted to borrow it.

The seven parts, which cover just about the whole range of issues in distance

education, are: historical and conceptual foundations; learning and learners; design and instruction; policies, administration, and management; different audiences in distance education; the economics of distance education; international perspectives. The number of chapters varies in each part, with most having eight or nine but part six (economics) having only three.

Each author was asked to consider three common questions: (1) What is the current state of your special research area in contemporary distance education in America?; (2) What knowledge about this is based on empirical research evidence?; (3) What further research is needed in light of the changes that are occurring?

Part one takes us through a series of contributions that cover the history, theory, and philosophy of distance education. (Contributors: Farhad Saba; Von Pittman; Charles Feasley; Ellen Bunker; Don Hanna; Börje Holmberg; Otto Peters; Randy Garrison, Terry Anderson, Walter Archer; Terry Anderson.)

Part two focuses on learning and learners and includes nine contributions with significant parts of them dealing with support for learners by institutions and instructors. (Contributors: Chere Gibson; Randy Garrison; Daniel Granger, Maureen Bowman; Robert Curry, Donald Winiecki; Kayleigh Carabajal, Deborah LaPoints, Charlotte Gunawardena; Connie Dillon, Barbara Green; Michael Hannafin, Janette Hill, Kevin Oliver, Evan Glazer, Priya Sharma; Cheris Kramarae.)

Part three, which is the one I mostly referred to, is on design and instruction. More than half of the chapters deal primarily with web-based or online instruction. (Contributors: Rick Shearer; Diane Davis; Alan Chute; Robert Wisher, Christine Curnow; Curt Bonk, Vanessa Dennen; Som Naidu; Richard Hall, Steve Watkins, Vicky Eller; Susan McKnight; Morris Sammons.)

Part four covers some important issues for both individuals and institutions, such as quality assurance, intellectual property, leadership, evaluation, globalization, equity, and access. (Contributors: Lucille Pacey, Erin Keough; Michael Simonson, Tamara Bauck; Amy Kirle Lezberg; Annette Sherry; Peter Dirr; Tomas Lipinski; Ryan Watkins; Roger Kaufman; Michael Beaudoin; Andrew Woudstra, Marco Adria; Linda Wolcott; Melody Thompson, Modupe Irele.)

The chapters in part five examine the role of distance education for diverse organisations in widely disparate corporations (the armed forces, community colleges, and high schools). (Contributors: Diana Oblinger, Sean Rush; Zane Berge; Kathy Perdue; Philip Westfall; Steven Jones, Larry Blevins, Wanda Mally, James Munroe; Michael Freeman; Christine Dalziel; Tom Clark.)

Part six is a short section that deals with the cost-effectiveness of different modes of distance education. It is kept as a separate part as it one of those perennial questions often ignored by practitioners. (Contributors: Greville Rumble; Insung Jung; Alistair Inglis.)

Part seven includes discussion on the effect of issues such as culture and globalisation, and how institutions such as UNESCO and the World Bank are contributing to teaching and learning around the world. (Contributors: Robin Mason; Charlotte Gunawardena, Penne Wilson, Ana Nolla; Terry Evans, Daryl Nation; Jan Visser; John Daniel, Wayne Mackintosh; Michael Foley.)

I have listed the contributors here as Moore assures us, in the preface, that they are all authorities on their subjects. On this basis I would have liked to have seen a short biography of each contributor, as there is an assumption that everybody in distance education will know who they are. However, in the overview Moore does give us some insight into the background of a number of the authors, as he has "worked to a greater or lesser extent with every one of them" (p. xi).

Despite the title it is really a handbook of American distance education, even though there are some non-US contributors. As Moore states in the overview, this book grew out of suggestions to bring his earlier book, *Contemporary Issues in American Distance Education*, up-to-date.

On scanning through the titles of the chapters, it is quickly seen that many deal with eLearning and the use of the web. As expected there are a number of chapters that consider the uses of technology which is timely considering the high profile of this area.

There is something for everyone in education, including those outside of

distance education who are currently looking at distance educators to see how they manage the issues that they are facing by going online.

To quote Moore:

If the present volume serves to temper some of the more impetuous enthusiasm and replace it with well-grounded understanding of the costs involved and of the need for substantial investment, training, reorganizing of administrations, monitoring and evaluation of learning, and support of learners—of the need, that is to say, for careful and long-term planning and development of new and different delivery systems—the authors jointly will have made an extremely valuable contribution. (p. xxiii)

These are definitely aims that we all should be working toward, and this text will certainly help to guide us on the way.

Moore makes much of the use of the book as a "source of enlightenment" (p. xi) for students, researchers, practitioners, and policymakers, so expect to see it cited many times in forthcoming articles. Also, it recently received the Charles E. Wedemeyer Award of the (United States) University Continuing Education Association for the outstanding book of 2003.

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REEVES, T., & HEDBERG, J. (2003). *Interactive learning systems evaluation*. Englewood Cliffs, New Jersey: Educational Technology Publications (pp. 297).

The authors are passionate about the evaluation of interactive learning systems, believing they are an essential component of quality of learning systems. They have written this book in the hope that it will raise awareness and ensure effective evaluation procedures are undertaken. It is aimed at "project managers, instructional designers, and implementers of interactive learning systems" (p. 3) to help with decision-making, the most important criteria in evaluation. I believe they have achieved their goal.

#### ABOUT THE AUTHORS

Professors Thomas Reeves and John Hedberg are experts in the field of multimedia and education, with diverse academic experience and publications. What makes this book especially useful is that the authors conducted a number of evaluations for clients while writing it, and used drafts as readings for their graduate students. I was one of those students. I found the information very useful while studying evaluation with Hedberg, and have since found it extremely useful for educating staff at my institution about evaluation techniques. Hence both practical experience and feedback from clients and students have shaped the book. The book is an easy-to-read mix of theoretical information on evaluation, linked to practical examples and solutions for effective evaluation. Each chapter has objectives listed at the start to alert the reader to what they can expect to gain from reading its contents.

#### OVERALL BOOK ORGANIZATION

To begin with the reader is introduced to a website that accompanies the book, where very useful templates of evaluation plans, sampling instruments, questionnaires, checklists, sample evaluation reports, and much more can be found: <http://it.coe.uga.edu/~treeves/ilse.html>.

It is evident that the authors want to share their knowledge and spread the word about evaluation, and they provide the tools to encourage and help others do it well. This is more than just a book; it is also a how-to manual, but a very professionally written and theoretical manual that is well researched, and aligned with both historical and current practices in multimedia-based learning (i.e., including CD-ROM and web-based delivery).

There is a mix of theoretical and practical information, beginning with a definition of interactive learning systems, paradigms and models of inquiry, functions of evaluation and planning, and managing the evaluation process. The reader is then taken carefully and in great detail through the different types/functions of evaluation: review, needs assessment, formative, effectiveness, impact, and maintenance evaluation. Evaluation reporting and how to enhance evaluation through research complete the twelve chapters. The detail is always just right and always applied to real-life examples. For example, in chapter four, all stages of the actual evaluation plan used by Reeves and Hedberg for the evaluation they conducted on the *Science of Amazon Exploration* interactive CD-ROM are presented, and there are very

realistic solutions for managing an evaluation project.

The main theme throughout the book is that evaluation must drive decisions. The second theme is that the ultimate aim of using effective evaluation techniques is to produce interactive learning systems, albeit CD-ROM or web-based, which provide educationally sound learning experiences for the intended audience. The message is that a professionally produced innovation is more likely to be marketable than a shoddy composition that has not been adequately tested and altered accordingly.

#### CHAPTER BY CHAPTER

Much of chapter one is devoted to interactive learning, and models of interactive learning are examined. The models of Taylor and Papert, proponents of computers as "tutor, tool, tutee" (p. 6), are discussed, and mention is made of the move toward communication-mediated interaction as more effective learning tools. Schank and Cleary's five teaching architectures for interactive learning systems are critiqued in some detail and aligned to case examples of best practise multimedia, and mention is also made of other worthy examples (*Jasper Woodbury* and *StageStruck*). There is mention of learning theories and their relationship to interactive learning, and some detail about delivery methods used for interactive learning systems. All this sets the scene for best practice and what needs to be examined through evaluation.

Chapter two is devoted to inquiry paradigms and evaluation models, and the writing is refreshingly frank about the authors' preference of the "Eclectic-Mixed Methods-Pragmatic Paradigm"

and their belief that several models of evaluation need to be used to obtain an effective evaluation. By the time readers have perused chapters three through five, they are well prepared to decide on the type of evaluation to be undertaken, have clear definitions of the six functions with hypothetical examples, and are equipped with a clear plan on how to go about it.

Throughout the book, the authors use tables and diagrams to illustrate concepts, models, sample questions, procedures, and steps in a process. This makes it easy to read and to flick back to for reference. I particularly like the way the hypothetical evaluation plan in chapter four is "chunked" in well-defined boxes of information. Chapters five through ten are each devoted to one type of evaluation function (review, needs assessment, formative, effectiveness, impact, and maintenance) and provide readers with practical ways to conduct each type, the reasons for it, questions to be asked, theories, sample tools and practical examples. For example, in the chapter on effectiveness evaluation, readers are introduced to implementation logs as a basis for interpreting system outcomes being measured. Additionally, the chapter provides very useful information about the design and pedagogy associated with effective learning systems.

Penultimately, in chapter eleven, readers find out how their evaluation findings can be presented in an evaluation report. The requirements for each section of the report are described and supported with examples. We are given samples of decisions and the questions that need to be asked to make them, e.g., the decision, "What learning styles should be accommodated by the web-based

training (WBT) system?" is accompanied by questions such as, "What are the individual characteristics of the target audience?" and "What learning styles can be accommodated by the design of WBT?" (p. 251).

Finally, chapter twelve takes us on a journey looking at evaluation and research in educational technology, with recommendations for development research to be carried out rather than the basic and applied research which has dominated the field so far. It is not clear how development research differs from action research or if it does differ at all but has been renamed, and that would be the only criticism I have of the book.

#### CONCLUSION

I would highly recommend this book's use as a course text as well as a guide on how to conduct evaluations. It removes all excuses and provides the means for action regarding the evaluation of interactive learning systems. Throughout, the authors are generous with their knowledge, and provide practical and user-friendly solutions and templates to get readers started on using effective evaluation techniques. This is a remarkable and very useful text and stands out on its own in the sea of how-to eLearning texts that are swamping the market. Make a wise decision, read it!

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