

# Book Reviews



***Children in the Digital Age: Influences of Electronic Media on Development.* Eds.**

Sandra L. Calvert, Amy B. Jordan, and Rodney R. Cocking. Westport, Conn: Praeger, 2002. 260p. alk. paper, \$49.95 (ISBN 0275976521). LC 2002-19509.

For years, people have been writing about the effects of television—and before that radio and movies—on children. *Children in the Digital Age* is a collection of essays centered on the effects of interactive media on children. Editors Calvert, Jordan, and Cocking have collected an impressive group of contributors to fill the pages of this thought-provoking work.

Similar to the general concerns regarding the effects of earlier media on children, interactive media—such as online real-time games, computer games, chat sessions, and, in addition, the pervasiveness of the Internet—have raised as much, if not more, concern than in the past. The potential harmful effects of interactive media are examined, but *Children in the Digital Age* also explores the demographics of access, expenditures of time, differences in gender behavior, and how online interactive environments such as MUDs and MOOs impact the development of identity in adolescents.

Four major sections make up this book: “Media Usage Patterns,” “Behavioral Effects of Media,” “Cognitive Effects on Media,” and “Family and Consumer Media Models.” The first section focuses on how children use the Internet. Much of the data gathered for this section rely on interviews with children and their parents and therefore are not as quantitative as this reviewer would like. This section also discusses a 1997 national survey related to children’s use of electronic media. Use patterns point to the fact that as interactive media become more widespread, users of both sexes tend to replace one medium with the next, so time previously spent watching television is be-

ing replaced by time spent playing computer games and on the Internet. The studies also show that, at least in the short run, computer media tend to enhance spatial and attention skills and that e-mail and chat have a positive effect on communication skills. The data from 1997 are dated and focus mostly on television and non-Web-based gaming devices such as Sega and Nintendo; the author indicates that new data were gathered in 2002 and will be published in 2004.

The second section looks at what behavioral effects media has on children. It points to the fact that children need constructive and well-designed virtual environments where they can explore and develop their identity. The study of health resources on the Web, for example, points to the fact that adolescents have high expectations for the resources produced for them: Web-based resources need to incorporate high production values, include imbedded effects, and be designed to keep their attention.

The third section deals with how interactive media affect cognition. The primary point of this section is that cognition develops differently among even those students who are of the same age, gender, and social position. The authors discuss the fact that interactive media lend themselves to instruction that is targeted toward individuals or small groups of students, allowing students to develop at their own pace. Carole R. Beal and Ivon Arroyo, authors of “The Animal Watch Project: Creating an Intelligent Computer Mathematics Tutor,” are of the opinion that as more study is conducted on computer instruction, computer tutorials will become more effective.

The fourth section focuses on the consumer aspects of media. Studies indicate that in the media arena, children and ado-

lescents tend to be early adopters, driving families to purchase computers and establish Internet connections. Ultimately, how much of an impact interactive media have on children is determined within the family and household. The total effect of interactive media on children, adolescents, and the family needs additional study.

This is a very interesting book. Well researched and well written, many of the chapters point to research that still needs to be completed. As librarians, we need to be aware of not only what technologies children and adolescents are exposed to in a learning environment, but also what technologies they embrace for play. This awareness will allow us to plan for the future and make us better prepared to meet the expectations of our patrons.—*Tim Daniels, Georgia Institute of Technology.*

***Rowing Upstream: Snapshots of Pioneers of the Information Age in Africa.* Eds.**

Lisbeth A. Levey and Stacey Young.  
Johannesburg: Sharp Sharp Media,  
2002. 126p. Free (ISBN 0620289139).

The preface of this book states: "The book you hold in your hands is an attempt to celebrate the achievements and document some of the most salient lessons learned from the experience of more than five years of work undertaken by successful pioneers of the technological revolution in Africa." I appreciate titles that hold up to the aims expressed in their preface, and this book certainly does.

The complex world of Internet technology, electronic communication, and information services is an ever-evolving one that increasingly defies facile description or summation. Books such as this one, then, must necessarily become histories of a particular program or period simply to limit the scope to something manageable. *Rowing Upstream* is both a summary of a five-year program and a glimpse into the lives of those who participated in the various projects funded by this program.

The book's structure often fuzzes the boundaries between personal reminiscences, institutional description, and

project narratives. This is an intentional effort, as the editors insist in their introduction that "it is important to note that philanthropy can and frequently does underestimate the capacity of institutions and individuals in the developing world to take the lead in promoting technological change ... *Rowing Upstream* testifies to the dynamism of Africans who are using technology creatively. Ford helped them secure the paddles, but they are rowing this boat by themselves." Throughout the book, there is an emphasis on illustrating that IT development is not just a top-down effort; it requires a coordinated and collaborative effort to "wire" a continent facing so many challenges.

The book does, in fact, celebrate the various ICT (Internet Connectivity Technology) initiatives and programs developed by those NGOs, philanthropic bodies, social service agencies, and individuals throughout the African continent during the late 1990s. The most enlightening—and perhaps most uplifting—message here is that despite the enormous economic and social challenges facing the people of the continent, information technology and electronic communication have not only taken hold but have developed along lines that strongly resemble routes that we in the "developed" world have taken, either blindly or by design. The same issues and challenges we have faced are echoed throughout this book. Tales of hooking up that clunky first modem, downloading that "free" upgrade that somehow disappears on your hard drive, and the mysterious hardware delivery to an unsuspecting reference librarian sound all too familiar. The fact that the hardware delivery described here was by canoe lends further insight to the unique obstacles and challenges faced by those who participated in building IT in Africa in the 1990s.

As told here, Africans have confronted—and conquered—the same thorny issues of building and enhancing electronic communication. More important, these technological developments have proceeded hand-in-glove with agen-