

Audiobooks and E-books

A Literature Review

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This article provides a thorough review of the research literature on audiobooks and e-books. The review encompasses literature from various disciplines. Additionally, the future of these formats is explored as well as the implications for libraries.

This paper reviews the current state of the research literature for audiobooks and e-books and discusses the implications for library services and collections. As audiobooks increasingly come in digital formats and e-books provide text-to-speech functions, the lines between these two once distinct formats is blurring. Additionally, several of the key studies in these areas use both audiobooks and e-books, either individually or together in the same study.

The research included in this review is drawn from a variety of disciplines—library science, education, psychology, and even medicine—in the form of journal articles, dissertations, reports, surveys, and blog posts, up through November 10, 2010. Library and Information Science Full Text Abstracts (LISTA), Library Lit, ERIC, Science Direct, Education Full Text, Digital Dissertations, and Google Scholar were all searched using “audiobook*” as keyword and the search string “kindle OR nook OR e-book” OR “e-book.”

No date limitations were used in the search, but the newness of these formats heavily weighted the results to the last few years. There was a longer history of audiobook research, but it is more limited in nature. E-book research has been considered for several years in education and psychology but only recently has made its way into LIS. Most of the published materials on e-books is found in the professional literature and is not research based. Additional materials were located by tracking down citations in news stories and in the reference lists of key articles. All located pieces (books, chapters, reports, articles, papers, news pieces) that reported on research, or are research based and thus useful for librarians working with readers or listeners, are included in this review.

AUDIOBOOKS

Over the last ten years audiobooks have moved from a small part of most public library collections that had a few dedicated listeners (often with long commutes) and an almost nonexistent commercial market to being a favorite for library patrons. The advent of affordable and easy-to-use personal digital music players which supported

audiobook files, the creation of online downloadable audio collections aimed at the consumer market like Audible.com, gradual growth in digital audiobooks that can be checked out by library patrons, and widespread popular interest in audiobooks have all led to audiobooks being one of the fastest growing and successful formats for both libraries and consumers. Audiobooks have also become increasingly accepted in classrooms and school library media centers and are even showing up in academic library collections. Clearly, the format has become an integral part of library collections and services, and with that comes the need for understanding the research about audiobooks and listeners.

This paper is divided into three sections: LIS research prior to 2006, education and other research pre-2006, and research published from 2006 to 2010.

LIBRARY AND INFORMATION SCIENCE AND INDUSTRY RESEARCH AND PRACTICE PRE-2006

Research Based Readers' Advisory by Jessica E. Moyer is the only LIS publication that reviews research on audiobooks and audiobook advisory.¹ Below is a condensed overview of the Research Review section of chapter 4, which reviews LIS research, some educational research, and industry research, all prior to 2006 but after 2001, an indication of the new and growing nature of this area.²

Chronologically, the first audiovisual (AV) advisory publication appears in *The Readers' Advisor's Companion*, "Viewers' Advisory."³ The title of Randy Pitman's chapter, "Viewers' Advisory: Handling Audiovisual Advisory Questions," leads readers to believe that this chapter will either be a how-to for AV readers' advisory or some research on AV readers' advisory. Instead, the chapter turns out to be a conglomerate of suggested places to look for AV information any reference librarian should know, with irrelevant personal opinion, a nearly complete lack of analysis, and a disappointing reference list. The last section, "Nontheatrical video," provides librarians working with AV a list of sources for reading about and finding videos. For librarians looking to become better readers' advisors for AV materials, or AV librarians wanting to learn more about doing advisory for their patrons, look elsewhere.

Fortunately for eager AV advisors there are some other useful publications. *Nonfiction Readers' Advisory* includes an excellent practice-focused chapter by Michael Vollmar-Grone, "Hearing and Seeing: The Case for Audiovisual Materials."⁴ Vollmar-Grone starts his chapter with a review of audiovisual materials over time, from the first time a presidential election was broadcast over radio (1920) to the increasingly prominent role of the mass media in today's popular culture. Vollmar-Grone's use of terms and definitions is commendable: "audiovisual materials" instead of the utterly generic "nonprint materials" and "information materials" instead of "nonfiction." Vollmar-Grone also includes a brief section on the historical role of AV in public libraries, which is important

for understanding the role of AV in today's public libraries. This leads into a discussion of reasons why AV is underutilized by librarians.

Vollmar-Grone's next section is one of the longer ones, but it is also very important and relevant—media literacy in today's media-saturated world. This chapter may be a few years old, but media literacy is not only still a big issue, it is more important today than it was in 2001 due to the proliferation of digital and "new" media. Vollmar-Grone does an excellent job addressing the tension between media as entertainer versus media as an informer. Librarians working with teachers (and administrators in some libraries) may need to work hard to overcome this tension, and Vollmar-Grone's clear discussion of these issues will certainly help.

In the last section Vollmar-Grone moves into the practical challenges affecting readers' advisors. First, he points out that all readers' advisors should also be viewers' advisors and listeners' advisors—the goals are the same: helping people find what interests them. This is such an important point, and it is heartening to see Vollmar-Grone make it right at the beginning of this section. Two pages of guidelines follow for readers' advisors working with listeners and viewers, and the chapter concludes with an excellent annotated list of suggested resources.

In "Special Needs/Special Places," in *Reading and Reader Development*, Judith Elkin brings an international research oriented perspective to this discussion.⁵ Elkin's focus is readers' advisory for patrons with special needs, which she defines broadly: "The range in disabilities is wide and includes motor, visual, aural, intellectual and emotional. Many of us probably have disabilities which are not even acknowledged as such."⁶ Many of the readers included in this category are best served with audiovisual materials and, in particular, audiobooks.

As in other chapters of *Reading and Reader Development*, Elkin does an excellent job reviewing the research in this area. She starts with a particularly important section, "Value of reading for people with special needs," which supports the premise that reading can be particularly important for people with special needs, as "people find what they need in what they read."⁷ By providing this review of research related to the value of reading for patrons with special needs, Elkin gives libraries the knowledge that there is such research and a place to go when they need to find it. In this section, Elkin includes two important quotes, powerful enough to bear repeating here in their entirety. Mathias, quoted in Elkin:

Books are not just print, they are sound and vision, large print, large format, CD-ROM. Books can be read using eyes, ears, hands and fingers. . . . Reading should be a pleasure not a punishment, and there is joy, satisfaction, and achievement in encouraging any child to read independently, but even more so when the child has special needs.

In the context of reading for adults with special needs, reading might be defined as being about the right book in the right format for the right adult at the right time and in the right place. Almost inevitably,

libraries and librarians play a significant role in ensuring this is a reality.⁸

For librarians who do readers' advisory, Elkin's next section, "Reading and people who are visually impaired," will be useful as many visually impaired readers who listen to audiobooks often have the same preferences and needs as sighted patrons who enjoy audiobooks. Elkin urges all library programs to be welcoming to listeners as well as readers. In order for listeners to make an informed choice, they will likely need a variety of information about an audiobook, information that is not always provided in traditional online library catalogs. Lastly, Elkin describes a new partnership in the United Kingdom. As part of the Branching Out Project, the National Library for the Blind has shown how popular audiobooks can be when marketed in the library to all patrons. National Library for the Blind has also partnered with Branching Out on other projects to make libraries generally more inclusive and welcoming to visually impaired patrons of all ages.

The next article moves away from the research and book-based publications to a more practical, but very important, article on readers' advisory and audiobooks. From the Readers' Advisory column of *Reference & User Services Quarterly* comes one of the keystone articles in audiovisual readers' advisory. In "Reading with Your ears," guest columnist Kaite Mediatore presents a well-researched and accessible article on readers' advisory for audiobook patrons.⁹ As commutes become longer and readers' lives busier, more and more library patrons are turning towards audiobooks. Patrons have a perfectly justified desire to have readers' advisors help them find good listens just as they expect help finding good reads. Mediatore reveals that like leisure readers, audiobooks listeners are everywhere and everyone. There is no one age group or demographic that doesn't listen to audiobooks, and most audiobook readers are also avid readers and already likely patrons of readers' advisory services.

Using many of the aspects of a traditional print readers' advisory interview, Mediatore gives plenty of practical yet research-based suggestions on readers' advisory for listening patrons. In her section on appeal, Mediatore targets one of the most important and unique aspects of listeners' advisory, the narrator. Regardless of the plot, the narrator can make or break a listening experience. Additionally Mediatore points out, for some listeners, the narrator trumps genre or other preferences. Some listeners will give anything Barbara Rosenblat or George Guidall narrates a try, regardless of the type of story. Mediatore also talks about books that don't translate well to audio because of the style of the writing or the special effects of the print. One recent example is Mark Haddon's popular *The Curious Incident of the Dog in the Night-time*. The text includes many puzzles and other visual effects, which cannot be conveyed in an audio version. Consequently, readers' advisors need to remember that not all print makes good audio.

Mediatore cites some important research conducted by Harriet Stow and the Collection Development Committee of

the Arlington, Texas Public Library that indicates more than 80 percent of readers prefer unabridged audiobooks, regardless of whether they want to read nonfiction or fiction. Even nonfiction readers, traditionally thought to prefer abridged, are found to prefer the unabridged so they can control the reading experiences and listen to the sections they want, not the sections someone else has deemed the best.¹⁰

Mediatore also adapts the ever-popular readers' advisory tactic of how to read a book in ten minutes to "Listen to a Book in Fifteen Minutes."¹¹ Using this clearly outlined strategy, readers' advisory librarians can quickly and painlessly make themselves familiar with a variety of audiobooks.

Greg Morgan provides an international view of audiobooks and services for print disabled readers in "A Word in Your Ear."¹² Morgan describes the Royal New Zealand Foundation for the Blind (RNZFB) and its upcoming initiative to transition from cassette tapes to the DAISY digital talking books for print-disabled readers in New Zealand. This article is valuable mostly for librarians who are interested in how other countries serve print-disabled readers. It describes and discusses the DAISY format for digital audio, which has been internationally adopted and is designed for print-disabled readers to be able to navigate the text with the same facility as a sighted person with a printed book.

In *Public Libraries*, Hampton Auld has written one of the few articles published in an American library and information science journal that addresses the same topics as Elkin and Morgan.¹³ As the first part of the Perspectives column in *Public Libraries*, Auld discusses the Talking Books Program, established by Congress in 1931 and administered by the National Library Service for the Blind and Physically Handicapped (NLS) at the Library of Congress. The essay by Jim Schepcke is worth reading for its view of how libraries in other countries are providing digital audio to library patrons, such as the Netherlands, where in 2005, patrons had access to thirty thousand digital audiobooks.¹⁴ Schepcke also provides valuable research on the Talking Book Program in Oregon and five other states.

The last article in the library literature about audiobooks comes from the May 15, 2006 issue of *Library Journal*.¹⁵ Ann Kim provides a positive view of audio downloading programs, particularly the Recorded Books/NetLibrary program from OCLC. What this article fails to mention is (at that time), none of these programs supported iPods, the dominant device in the digital audio market. It misses the most critical question: should libraries spend money and staff time on a program that will miss 80 percent of potential listeners?

Additional research and related publications for AV readers' advisory comes from the bookselling and AV industries. Aimed at booksellers, Eileen Hutton's short and opinionated piece in *Publishers Weekly* has both good advice for librarians and some great facts: "More than 97 million people drive to work solo each day and the average delay due to traffic congestion has tripled in the last 20 years."¹⁶ Hutton thinks bookstores are prejudiced against audio, frequently hiding it in the back of the store and giving it little advertising space.

There are probably a few libraries that also make this mistake. Hutton makes some excellent suggestions for increasing awareness of audio among staff and patrons, for example, “when a customer asks for a new book by Nora Roberts the best response is: ‘Do you want the hardcover, cassettes or CD?’”¹⁷ Or now we should add “would you like to download it to your digital audio player?” That will get both staff and patrons thinking about the different formats available and hopefully decrease some of the discrimination against audio. Hutton also suggests the tried and true readers’ advisory training strategy of getting staff to start a listening program. “When sales people become audiobook addicts, they pass on the addiction to customers.”¹⁸ Lastly, Hutton provides some suggestions for increasing visibility of audiobooks, including the suggestions of including the audio version at every book signing and always shelving the audio alongside the print in any displays.

Robin Whitten provides the one source of data on the audiobook publishing industry in “The Growth of the Audio-book Industry.”¹⁹ Additional and more recent information can be found in the 2006 press releases from the Audio Publishers Association.²⁰ In terms of formats, downloadable audio continues to grow, increasing from 6 percent to 9 percent of the market. A significant portion of users of MP3 players have downloaded digital audio, making digital audio the fastest growing area. Compact disc usage also continues to grow, up from 63 percent to 74 percent, while sales of cassettes are on the decline, from 30 percent to 16 percent. Fiction persists in dominating the market at 58 percent, but nonfiction makes up a healthy 32 percent, marking the trend of popular nonfiction, noticed in recent years by many readers’ advisors. In general, publishers report publishing more unabridged titles and fewer cassettes, in some areas eliminating cassettes entirely from production.²¹

The data on audiobook readers tells librarians a lot about the listening patrons they are most likely to serve in the library. Nearly 84 percent of respondents had attended college, making audiobook listeners a well-educated group. Listeners have higher incomes, and many have children. They also read printed books, with more than 94 percent indicating that they have read a print book within the last twelve months. Listeners are readers, too.²²

Listeners still greatly prefer unabridged listening, and most listeners who purchase their audio do so at physical stores (as of 2006). The percentage of titles borrowed from libraries has also increased, from 38 percent in 2001 to nearly 52 percent for 2005. “The most important factors for consumers when selecting audiobooks are price, availability on CD, author, description and narrator.”²³ How do consumers actually select audiobooks? More than 40 percent use websites and recommendations from friends and over 30 percent use information provided at the bookstore or on bestseller lists. Libraries barely break 30 percent even though more than half of audiobooks are borrowed from libraries. One good note is that the more titles a listener listens to in a year, the more likely the listener is to ask a librarian for a suggestion.²⁴

AUDIOBOOKS: ADDITIONAL EDUCATION RESEARCH PRIOR TO 2006

The educational literature is rife with examples of ways audiobooks have successfully been used in the classroom.²⁵ One example is in a lunchtime book discussion group for English language learners, in which students improve their language skills while enjoying the same popular books as their classmates.²⁶ Others like Gillie Byrom’s early study on using audiobooks with struggling readers suggest great potential for use of these alternate formats.²⁷

R. M. Casbergue and K. Harris’s literature review is an excellent summation of pre-1996 research on listening and literacy.²⁸ Their review notes the importance of hearing stories for both younger and older children and segues neatly into an argument for including audiobooks in the curriculum. This was the first article to note a now commonly accepted trend in the increasing quantity and high quality of audiobooks for children and teen readers. The remainder of the article gives many examples of ways that incorporating audiobooks into reading classes could benefit students (ESL students, struggling readers, etc.), all of which are also discussed in the articles on practical applications. They conclude with a section on the selection of audiobooks, which is technically out of date but does make the important and still valid point that abridged texts are to be avoided as it denies students the joy of being involved with the complete, authentic text and reading experience.

One of the only studies of library audiobook users, John Yingling’s 1998 thesis gathered data on the audiobook listeners of a public library and many of the conclusions are still valid for library collection development.²⁹ Unabridged productions are greatly preferred over abridged, listeners place little significance upon an actor or actress as narrator, and subject is one of the most important factors in selection of titles for checkout. Interestingly, Yingling found that a significant number of the listeners did not visit the print books section of the library, showing that there is a dedicated listening audience.

Teachers, and to a lesser extent, librarians, may be suspicious of audiobooks and not willing to allow them as a substitute for “real reading.” Pam Varley’s essay in *Horn Book* should go a long way toward changing minds and helping teachers feel more comfortable allowing children to “read” audiobooks just as often as they read print books.³⁰ Varley’s essay is unique in that she discusses the historical use and attitudes towards audiobooks and education and addresses the traditional differences between adult’s and children’s use of audiobooks. By combining quotations and research from both education and LIS, with excellent examples from recent audiobook productions, Varley makes her case relevant to teachers and all types of librarians.

Irene-Anne Diakidoy et al. studied children’s listening and reading comprehension in both narrative and informational texts, one of a few recent studies to compare the different types of comprehension across texts and formats.³¹ This

ambitious study not only compared children's comprehension in two formats and two types of reading materials but repeated the research with 612 children at different grade levels, grades 2, 4, 6, and 8, enabling them to note any changes in comprehension abilities across age groups, from early readers to accomplished teen readers.

Diakidoy et al. found that the relationship between listening and reading comprehension becomes stronger after children have mastered decoding, meaning that readers who have mastered basic reading skills have strong positive relationships between reading and listening comprehension and that listening comprehension does not exist independently from reading comprehension. The researchers also found that the differences between listening and reading comprehension decrease with grade levels, and older students were more likely to have equally good or higher reading than listening comprehension, while younger students often had better listening comprehension. Finally Diakidoy et al. found that over all age groups reading and listening comprehension were weaker with informational texts than with narrative texts. This last find has limited relevance for this paper but great relevance for children's and adolescent literacy as it shows definitely that regardless of the format, children and teens are weaker at comprehending informational texts, the same texts that are required for all their subject area learning in secondary schools.

In regards to audiobooks, this research shows the importance of fostering children's listening comprehension, both for younger listeners who are better at it than reading comprehension, and for older readers who still need to practice listening comprehension. The weaker comprehension of informational texts could also be remedied with additional listening time as there are an increasing number of nonfiction audiobooks for younger listeners.

AUDIOBOOKS: EDUCATION, LIBRARY AND INFORMATION SCIENCE, AND PSYCHOLOGY RESEARCH SINCE 2006

Many of the recent publications about audiobooks continue to revolve around awards and new technologies, and while important developments, these items contribute little to the understanding of audiobooks and reading. However, they are of critical importance to librarians as they decide which formats to purchase—should libraries still buy cassettes, CDs, or MP3s? If libraries go with digital audio, then which system is best for their users? What about the new self-contained audio devices, Playaways?

Articles such as Susan Hoy's overview of spoken word materials and downloadable audio services for libraries, including formats and devices, are essential reading for busy librarians.³² She also considers collection development issues and emerging audio and playback technologies. S. Maughan authored one of many articles to note the trend in digital downloadable audiobooks, an increasingly popular option

with patrons, consumers, and libraries.³³ J. Milliot wrote the first of several articles announcing that publishers and retailers are dropping the cumbersome and frequently problematic digital rights management (DRM) encryptions.³⁴ This culminated in the announcement in early 2009 that Apple is dropping DRM for all the songs in its iTunes store. Since Apple and iTunes have been a leader in digital audio and the use of DRM, this is likely an indicator that DRM is becoming a thing of the past.

For all things digital there is one single paper that addresses digital audiobooks, specifically for the library market, a 2007 issue of *Library Technology Reports*.³⁵ Although in some aspects it has already become outdated, it is still the best resource for understanding the complex world of digital audiobooks. In addition to a complete listing of web-based sources for digital audiobooks, Tom Peters makes clear the rather murky and confusing issues surrounding DRM and Apple's iPod MP3 player. Written by and for librarians, this report is also full of references and research, making it more than just a practical contribution and should be required reading for all public services library staff.

Jan Engelen compares and contrasts the long established audiobook market for visually impaired readers with the booming commercial audiobook market, from a European perspective, a useful update and alternative to Auld's Perspectives column from 2005.³⁶ With a practical emphasis and covering a wide range of materials, Engelen's work would be especially useful to librarians working with visually impaired listeners or those considering new or revised programs or technologies.

Other recent practice-oriented publications include case studies such as "Audiobooks on iPods: Building a program for a research library," which details a case study of an academic research library that created an iPod-based audiobook collection for patrons with focus on leadership and management skills.³⁷ iPods were also loaded with podcasts and eventually video seminars. In addition to describing how the program was created and how it worked, Nancy Allmang also covers the difficulties in dealing with DRM.

Teachers and librarians new to audiobooks may be unfamiliar with the qualities of a good audio production and in need of a quick guide to evaluation. In "Sounds Good To Me," Mary Burkey, school librarian and chair of the inaugural Odyssey Award, has written just such an article: a brief overview of the important qualities and elements present in a good audiobook production.³⁸ A. Cardillo and other industry experts contribute a useful article that covers three distinct types of audiobook recordings, along with some rationales for using audio with children and teens. The industry viewpoint makes this unique, and it will assist library staff in understanding and categorizing their audio collections.³⁹

Recent educational articles emphasize the practical aspects of using audiobooks in the library, school library media center, or classroom. The case study "Getting teens to read with their ears" showed how one school librarian successfully used Playaways to reach out to busy high school students.⁴⁰

Teachers and librarians interested in using audiobooks, but in need of convincing research or publications, will benefit from the well researched article by R. C. Clark, in which she succinctly notes and then rebuffs the arguments against audiobooks.⁴¹ Clark also mentions the challenges of introducing audiobooks and most importantly, using research, shows the importance of listening comprehension and its use as an indicator of later success.

Written entirely from the education point of view and with a more comprehensive literature review, G. Wolfson's article covers much the same ground as Clark, focusing on the value of using audiobooks.⁴² Wolfson deals exclusively with adolescents, whereas Clark's article is more generally focused on all youth. In addition to the Guidelines and Suggestions for use of Audiobooks section, Wolfson has an extensive research-based section on why adolescents should be using audiobooks as part of their language arts curriculum, focusing on such important topics as allowing struggling readers to focus on the words and the story instead of struggling to decode, allowing all students to enjoy and experience the same texts regardless of reading ability, and developing or honing listening comprehension skills. Up to date, clear, and to the point, this is the perfect article to give to an administrator or teacher reluctant to use audiobooks and any librarian not yet convinced of the value of spending precious collection dollars on audio collections.

Joel R. Montgomery's paper includes an extensive literature review similar to Clark and Wolfson that also includes some more recent works.⁴³ Sections on the consequences of below grade-level reading and fluency and comprehension for native English speakers and second language learners are especially helpful for school library media specialists. Examples of tested techniques using audiobooks in practice at libraries and classrooms will be useful for all librarians interested in working more with youth and audiobooks.

Brett Cooper contributes an action research article based on a year-long project conducted in his classroom.⁴⁴ Inspired by a student who had difficulty with silent reading, he used audiobooks with small groups during silent reading time. At the end of the school year, ten students were reading significantly above grade level, and one was significantly below grade level. Fifteen students increased more than one and a half grade levels. Nine students increased about one grade level and two students showed limited growth. Six students showed growth of more than two grade levels. Cooper concludes that books on tape do have a positive impact on students' test score results and comprehension. At-risk students were able to improve up to the basic level and a few up to the proficient level. The basic and proficient students were able to increase their levels, with many improving to the advanced level. Students also showed improved attitudes toward reading, especially those reading below grade level and reluctant boy readers.

There is a small but significant collection of purely research based articles on audiobooks, and most have been published in the last few years, another indication of the

growing popularity of the audiobook among all age groups. These works come from education, library and information science, medicine, and psychology, showing the multi-disciplinary nature of studying reading and audiobooks.

B. Winn et al. provide strong and convincing evidence for the use of audiobooks with struggling readers of all ages and the need for more research that studies links between listening and reading comprehension.⁴⁵ Studying students in upper level elementary grades who had been diagnosed with a reading disability, Kelli Esteves looked at the efficacy of using digital audiobooks paired with print texts, versus traditional print books, during silent reading times. She found that the students in the audio-assisted group made much more significant gains in reading fluency, which is more evidence for the impacts of audiobooks on struggling readers.⁴⁶ In a related work, Ann Milani et al. studied children and adolescents with dyslexia in an experimental design using school and leisure reading texts and found that the students using audiobooks experienced significant improvements in reading accuracy, gains in general school performance and motivation, and increased involvement in school activities, strong evidence for the importance of using audiobooks with struggling or learning disabled readers.⁴⁷ These are especially important results as they reinforce the importance of providing readers with materials in multiple formats.

Patrick Lo, in a paper presented at 2009 IFLA World Congress, conducted a similar study in Hong Kong, looking at Naxos Spoken Word Library, a digital audiobooks collection, and fifth- and sixth-grade students' motivations to read.⁴⁸ Lo found that the availability of the digital audiobooks collection in the school libraries did not increase student's motivations to do leisure reading or listening and that girls were more likely to use the library for leisure reading or listening and use the Naxos collections. He attributed these results partially to a lack of materials that interested many of the student readers, especially the boy readers, and concluded that if the library is to succeed in attracting and motivating readers, but especially boy readers, then the collection needs to better reflect their interests, a result that is relevant to all types of libraries serving listeners.

Matthew Rubery, a humanities scholar, overviews recent development in digital and audiobook technologies in a manner designed to be understood by non-specialists, a useful summary for librarians without a technical background.⁴⁹ He also makes a connection between today's audiobooks and the popular pastime of the Victorian era of reading aloud and reflects on attitudes towards reading aloud and listening to audiobooks.

Duncan Ross's survey has implications for audiobooks as he finds that over 40 percent of current library users own an iPod, 30 percent another MP3 player, and almost 70 percent of library patrons already listen to some form of audiobooks.⁵⁰ Unlike the APA data, which shows heavy use among younger listeners, the majority of patrons who borrowed library audiobooks were over fifty, and the library was their primary source for audiobooks, with the far distant second choice being the Internet followed by iTunes.

There are a few detractors who are opposed to audiobooks, but these are found primarily in the visually impaired community, and their arguments revolve around those who learn Braille and “read” texts versus those who get all their “reading” through listening. Some researchers are concerned that those who only listen may fail to develop certain areas of the brain and that members of oral societies think differently than those of literate societies. These concerns are being validated by brain imaging studies, but these results cannot be generalized to the larger population.⁵¹

E-BOOKS AND ONLINE READING

This section of the literature review is also in three parts: the first on online reading, a complementary research tradition that greatly informs what we know about e-book reading; the second on e-books used in the classroom that are not on dedicated e-book readers; and the third section devoted to research and publications that use dedicated e-book readers, such as the Kindle, Nook, or Sony Reader.

Online Reading

There is very little research specifically on e-books and e-book readers. There are plenty of articles that discuss the e-book readers and their technical features but very few that talk about the e-book reading experience or use e-books or e-book readers as part of the research design. Because of this, I have chosen to include the research on online leisure reading and extend the findings to e-book reading as appropriate. Even then, research on online reading is much smaller than that on audiobooks because it is so much newer. Online reading has only existed since the early days of the personal computer and has only been widely popular since the mid 1990s explosion of home computers and web access. Research often trails practice, and thus there are only a few years of research with which to contend. While the research on audiobooks was limited before 2001, because books on tape and even books on LP have been collected by libraries for many years, there is a more substantial body of practice articles, and librarians, as a general rule, seem to have some basic knowledge of audiobooks. None of this is true for e-books and online reading—these formats are too new to have really permeated the library world. As a result, nearly all the research comes from education or, more recently, publisher and marketing reports.

There are hundreds of articles and book chapters on online reading, but nearly all focus on online reading in terms of information seeking (e.g., Coiro and Dobler), particularly in the library science literature. In this section I am looking only at those articles that touch on leisure reading online. This includes reading and writing instant messages, reading and writing fanfiction, and searching for online reading for leisure. Studies that focus exclusively on classroom practices or uses of online reading solely for instructional purposes are also excluded, but any classroom based study

that involved silent reading time or choice in reading materials is included.⁵²

Grimshaw et al. is the first article to be addressed in this section because it included both e-book and audiobook components, overlapping with the previous section.⁵³ It also included a more recent and comprehensive overview of e-book research. In terms of previous research, the literature review section includes key information on both audiobooks and e-books. Grimshaw et al. discuss the research on the value of audio for struggling readers as it helped reduce the amount of working memory devoted to decoding, allowing the readers to focus on meaning and general comprehension, both key features of leisure reading. The dynamic cues provided by narration, sound effects, and emphasis of audiobooks go beyond printed texts in terms of assisting readers in integrating the meaning of the text.⁵⁴ Previous e-book research has found that when reading challenging texts, readers using the e-version with integrated dictionaries and pronunciation guides had higher comprehension scores than children who would have had to ask an adult in order to gain the same information.⁵⁵ Some studies also show that children were more eager to engage with the e-books and more motivated to do the reading task than those assigned to print conditions. Even if this is somewhat related to getting to use a new toy, anything that increases children’s engagement and motivation needs to be considered.

The RAND Reading Study Group was one of the first to publicly acknowledge the changing nature of texts and reading, noting “electronic texts that incorporate hyperlinks and hypermedia introduce some complications in defining comprehension because they require skills and abilities beyond those required for the comprehension of conventional, linear print.”⁵⁶ Julie Coiro built on this in her work on online reading comprehension, focusing on understanding the complex nature of online reading comprehension.⁵⁷ Coiro is an excellent overview of online reading and comprehension and the research surrounding it, as of 2003.

In a follow-up study Coiro and Dobler used a selective sample of eleven highly skilled and able sixth graders in a qualitative study using verbal protocols and interviews. They concluded that online reading in terms of computer-based, web-based reading (not necessarily leisure reading) was more complex as it required all the elements of print reading plus more complex applications of prior knowledge, inferential reasoning, and self-regulated reading processes. One reason for these additional levels of complexity may be that online reading prompts self-directed text construction in ways that are significantly different from print reading.

Another overview of online reading comes from D. J. Leu and L. Zawilinski, with an emphasis on the implications of new literacies and online reading for the classroom.⁵⁸ As school media specialists need to work closely with teachers, this article is an excellent choice for them. Leu and Zawilinski argue that today’s students’ reading and writing lives are based around computers and the Internet, and thus instructional strategies that teach and recognize the more

complex comprehension required in this medium are essential in today's classrooms if educators are going to successfully teach today's children. Their article includes several steps for integrating the Internet and computers into classrooms in thoughtful ways that help students at all socio-economic levels prepare for the literacy skills needed in the not too distant future. When students visit public or academic libraries they expect and assume that they will be able to read and access materials in the same way that they do at school. This makes it critical for library staff to understand how students are reading and learning in the classroom.

In an early study of college students and online reading, E. Ramirez found that most students (78 percent) preferred print, and only 18 percent preferred digital.⁵⁹ However, that data is now more than six years old, which is a long time in rapidly evolving technology, and likely did not include students who had grown up reading online. Today's eighteen-year-old college students are likely to have been reading online their entire lives, since they were born around the time of the advent of graphical web browsers and the explosion of the web.

Published shortly after, Z. Liu's first study of online reading consisted of older readers (born between 1960 and 1975) and finds a strong preference for print (over 90 percent), with only 3 percent preferring digital formats for reading.⁶⁰ With only a ten year gap between the subjects in Liu and Ramirez, already there has been a significant increase in preference for digital reading, with more than six times as many respondents preferring digital reading. Clearly this is a rapidly changing area of reading, especially among younger readers.

Online reading with college students has also been recently studied in terms of gender differences.⁶¹ Researchers found that when asked about their preferences, female students had a significant preference for print while male students were more willing and more satisfied to read online. While not addressed in this study, one likely result for this explanation is that female students read more fiction, and fiction reading is more commonly done in print, whereas the male students are reading more nonfiction, which can just as easily be read online, and in fact may be more readily available online. While this study was conducted with Chinese college students, there is no reason to believe that these results would not be generalized to college students in other countries. In comparison with research on American readers, Liu and Huang reported that Chinese students were more likely to prefer online reading and less likely to print out materials that could be read online. There are many possible explanations for this result, not the least of which is less readily available access to paper and printers for the Chinese students. Liu and Huang concluded that the main drawback and reason for less online reading is because of readability. While the issue of readability is valid for computer and screen-based reading that relies on backlighting technology, the new e-book readers that use e-ink technology and no backlighting do not have this major obstacle. While Liu and Huang's results are interesting, the major drawback is that the entire study is

based on self-reported data. It does, however, provide some interesting points for further research.

William Douglas Woody, David B. Daniel, and Crystal A. Baker worked with college-age students and focused on the use of digital textbooks, an increasingly available option for college students.⁶² They studied college students enrolled in an introductory course and who had indicated that they had previously used a digital textbook. The researchers found that the students reported greater satisfaction when using print books, that they were more likely to read captions in print, and that they were not likely to utilize embedded links in the digital texts. Woody, Daniel, and Baker found no gender effects and no difference in students who had previously used digital textbooks. As all of the students in this study were reading their books on computer screens instead of dedicated e-book readers, this may well account for the students' lack of interest in using the digital texts as it required more computer time. Similar results were found in "Usability Evaluations of E-books," which concluded that students who grew up reading print books may be less likely to adapt to digital texts, and the resolution of the images on the screen can impact eye fatigue.⁶³

E-books in the Classroom

This section covers only a few of the studies most relevant to libraries and library services. An in-depth review of e-books in education settings can be found in Tricia Zucker, Amelia K. Moody, and Michael C. McKenna's research synthesis on the effects of e-books on literacy for elementary students.⁶⁴

Grimshaw et al. investigated the differences between children's comprehension of popular storybooks based on medium of presentation.⁶⁵ The researchers used print versions and e-book versions, some of which included professional audio narration in addition to the electronic text. They found that the children (ages eight to fifteen) enjoyed reading the books equally in all three types of formats and that comprehension scores were the same across all three formats, except for the audio plus text condition which resulted in significantly higher comprehension scores. The type of medium did not significantly influence children's desire to finish reading the text.⁶⁶

This study also used a dictionary condition in which the students were provided with either a print dictionary or an electronic dictionary integrated into the text using hyperlinks. While there were no significant differences in comprehension in the dictionary condition, students with the e-book used the dictionary at a rate of 69 percent (18 out of 26 students) versus 4 percent (1 out of 25 students) in the print condition.⁶⁷

In a recent educational study, Ofra Korat found that children who used e-books instead of the traditional print books made significantly more gains in comprehension and general reading skills than the students who interacted with the print book, indicating that the adoption of e-books in classrooms may greatly benefit student readers.⁶⁸ In a similar study, Adina

Shamir et al. found that children who were assigned to any of the three treatment conditions that used e-books made significantly more gains in emergent literacy than children assigned to the printed book control group.⁶⁹

One interesting conclusion that can be drawn from the e-book studies in educational settings, particularly those with younger readers, is that eyestrain does not seem to be an issue. Most of the e-books in use in education settings are still computer based (and often interactive) or use dedicated devices that use LCD screens, yet eye fatigue or other issues related to backlight screens are never mentioned as a problem. This may very well be a result of the age of the participants. Younger children may spend less time overall using computers, or they may be so used to interacting with technology that uses an LCD screen that it never becomes an issue. This is another indication that there may be significant generational differences with readers of e-books.

E-books and E-book Readers

Most common in the LIS literature are articles like the one by Stephen Abrams that provides technical overviews of the various e-book readers and formats.⁷⁰ While useful, these become outdated almost as soon as they are published. However, Abrams's is a particularly thorough overview that is worth perusing, particularly for information on some of the lesser known devices. The American Library Association has tracked library lending of e-books in a handy map available online.⁷¹ Outside of the LIS field, in the publishing world articles debating the merits of e-books and e-book reading abound, such as an editorial which gathers a disparate group of researchers and writers to offer four different views of e-books and online reading and the Heather McCormack article in *Digital Book World*, which is a persuasive argument for library purchasing and lending of e-books.⁷² Reports from large research groups, like the Kaiser report, are not only readily available online, but are widely reported on.

There have been a few studies of the technical aspects of e-book readers and e-ink which found that larger characters may increase reading accuracy, which is not a problem for most e-book readers as they include multiple text sizes.⁷³

Another recent study of the Kindle as an e-book reader used it in a study with an iPad and a personal computer. Participants read a complete short story on one of the devices and then in a regular printed book.⁷⁴ While this study claimed to find that reading on the Kindle and iPad was slower, little information about the methodology was revealed, and it is likely that the small sample sizes used in the study were too small to have statistically significant results.

REPORTS AND WHITE PAPERS

The Kaiser report finds high levels of ownership of cell phones and MP3 players, which are used more often for media consumption than phone calls, and many of these devices

support e-book reading.⁷⁵ The recent Pew report finds that 84 percent of teens have home Internet access, and there have been great increases in media consumption and multitasking media consumption. The average teen consumes over ten hours a day of media in seven hours of time.⁷⁶ Daily print consumption has dropped five minutes from forty-three minutes to thirty-eight minutes. However, the print count "does not include time spent reading on computers or mobile devices. Time spent reading newspapers and magazines online is captured and counted in computer usage," which skews the results.⁷⁷

Scholastic recently reported that children had significantly more positive attitudes to digital reading than adults as most were interested in it, and one-third indicated that they would read more if they could access digital texts.⁷⁸ Parents were concerned that digital activities would not provide the same experiences as print reading, and that it would keep children from other activities like exercise or interaction with family or peers. One of the more interesting results from this survey is a question about how parents versus children define reading—children are much more likely to consider non-traditional activities reading (e.g., searching for information online, reading social networking sites, and texting).⁷⁹

One of the most recent articles is from Australia, but it has results very relevant to American libraries.⁸⁰ Duncan Ross surveyed Australian public libraries and their users and found that there is a high level of interest in e-book readers and related technologies (iPads or iPhones), something that will not surprise most librarians. He contends that libraries must rapidly and dramatically increase their digital offerings or lose current and future library users. Ross's brief overview of e-books and e-books readers, along with recent consumer data, will be useful to librarians interested in learning more. While only 25 percent of the population currently reads e-books, more than 60 percent are interested in reading one or learning more about them, numbers that libraries need to seriously consider when allocating collection budgets. Most library patrons would be willing to check out e-books, and many would even buy a device just to access library collections.

The Australian Romance Readers Survey from 2009 also provides some valuable data on e-book and e-book reader use and adoption.⁸¹ While more than half of respondents do not use e-books, of those that do, the most popular reading devices were desktop and laptop computers, followed by e-book readers, phones, and PDAs. One interesting result here is that the iPod was not listed as an option but was the most commonly written in response.⁸² In terms of book purchases, independent bookstores were first at 23 percent. This may have implications for e-book purchases as well, as those almost always need to be purchased online. Of the respondents, 5 percent of respondents already purchase directly from publishers, which for publishers interested in selling their e-books directly to customers, they already have an established customer base.⁸³ In terms of e-book purchasing, in 2006 40 percent of Australian romance readers already purchased e-books and an additional 15 percent say they plan to purchase

e-books sometime soon.⁸⁴ This is also quite a law abiding group—of those that have downloaded free e-books, the vast majority do so from official publisher or author sites only.⁸⁵

OverDrive, the leading vendor in providing downloadable e-book content to public libraries, recently published a white paper, “How eBook Catalogs at Public Libraries Drive Publishers’ Books Sales and Profits,” something that should prove particularly useful for librarians attempting to work with publishers who refuse to sell e-books for library loans.⁸⁶ This paper argues that “public libraries hold sizeable marketing potential for publishers and authors. This prospective reader audience can be captured through discovery on shelves and in catalogs, in addition to author tours, bookmobiles, and book clubs.”⁸⁷ OverDrive notes that only one other e-book distributor has realized this potential,

Sony Electronics has realized the market power presented by public libraries. At Sony’s retail eBookstore, the Reader™ Store, Sony has a Library Finder application promoting the available of eBooks at libraries and Sony Reader’s compatibility with eBooks checked out from libraries. Sony has used this compatibility as a distinguishing feature to drive both device and retail eBook sales.⁸⁸

In a point that should really resonate with publishers, the report concludes, “Libraries are not simply meeting the demand for eBooks, but they are whetting the consumer appetite.”⁸⁹ With plenty of data to support these points, this report is one that librarians need to be using to convince publishers to sell e-books for library loans, just as they sell print books.

COLLEGE STUDENTS AND E-BOOK READING

Colleges were among the first to test the use of Kindle e-book readers in the classroom as a replacement for printed textbooks. Early studies which used the first generation of the larger sized Kindle DX found a minority of students quickly adopted and enjoyed the Kindle, but most were frustrated by difficulties in note taking and highlighting; other colleges had to drop their pilot programs when it was determined that the Kindle DX was not easily used by visually impaired students.⁹⁰ As all of these issues have been addressed by updates and new generations of the Kindle readers, additional studies will likely find quite different results. Faculty who insisted on page numbers in citations, or failed to use the Kindle’s more precise line identifying numbers when discussing texts in class, also contributed to poor results. What these college pilots did find was that students were quite interested in using the Kindle for recreational reading and were very likely to recommend it to friends and family for recreational reading. Others argue that the Kindle won’t be the device to replace textbooks, instead promoting the iPad and similar tablet computing devices, due to their interactive nature, color displays, and ability to play video clips.⁹¹

Another corporate study of college students and e-books finds that e-book and e-book readers have yet to really catch on with college students, with most digital texts being purchased for class and a low level of e-book reader ownership.⁹² This doesn’t necessarily mean that college students don’t like e-books, just that they currently don’t have a lot of access to them, which may very well be a function of the limited disposable income of college students and the still substantial prices of dedicated e-book readers.

CONSUMER AND PUBLISHER DATA

What do we know about the readers and users of e-books and e-book reading devices? Publications on market and consumer data are often locked up and hard to access, available only to members or for purchase, making them generally inaccessible to librarians. Luckily second hand reports provide handy summaries.

Places where ebooks are downloaded: Amazon still holds the top spot at 61%— B&N has 20%, Libraries 7%. . . . Right now Kindle holds the top spot for devices at 40%—just passing the PC/laptop in the last survey at 39%. Among ebook buyers, print is definitely losing ground—nearly 50% of ebook readers now say they are buying exclusively or almost exclusively ebooks and 49% indicate they either MOSTLY or exclusively purchase ebooks. Of those who own devices today 44% indicated they received their device (purchase or gift) in the past 6 months.⁹³

The Price Waterhouse Coopers report, “Turning the Page, the Future of eBooks,” provides some of the most recent information on the e-book market, although it is very heavily weighted to the publishing perspective, making it only mildly useful for librarians.⁹⁴ This report also focuses on the differences between the North American and European markets, notably, the low interest levels on the part of European publishers to adopt and sell e-books. However, as this report argues, the successful and rapidly growing e-book market in the United States will soon be found in Europe as the most popular e-book reading devices (Kindle e-book readers and iPads) are now available in Europe as well as in the US, and the European consumers’ increased awareness and interest in e-books.⁹⁵

LIBRARIES AND E-BOOKS

A few library associations have conducted similar projects and their information is much more readily available, like the COSLA study based on interviews with library leaders and state librarians.⁹⁶ The two most relevant areas for this report are the section on devices and the section on access. In terms of devices, “For devices meant for library lending and use, respondents added some remarkably consistent needs.

They would need to be simpler than any other device, more durable, much cheaper (\$100 or less seems to be the magic number), rechargeable, with no cords required for use, larger controls, and accessibility options that work for the largest range of people possible.⁹⁷ Most respondents expressed discomfort over lending somewhat fragile devices that cost over \$300. Some stated they couldn't include devices in their public services until the price drops significantly. Many see the role of the library as a place for patrons to try out new technology. Currently the biggest access issue facing users is that public computers cannot be used for downloading library e-books and the generally convoluted procedures used for finding and checking out e-books.

For the most part, only preliminary case study-based information is available on the use of Kindles in libraries.⁹⁸ Lotta Larson studied two second-grade readers over several weeks of using a Kindle for thirty to forty-five minutes a day, and her results suggested that using the Kindles promoted new literacy practices and extended connections between reader and text made possible by the interactive tools integrated into the Kindle. She found that the two readers used all the features of the Kindle, adjusting the font size, accessing the dictionary, and using the text to speech. The two students felt that the reading experience, for them, was the same as with a book or even better, and Larson found that over the course of the study both girls had increased positive attitudes towards reading and made regular comments about their preference for the Kindle over traditional books.

Similar results are reported in a new book, *No Shelf Required*, in chapter 4, "E-books in the Public Library."⁹⁹ Like Grimshaw et al., Amy Pawlowski combines e-books and digital audiobooks as, in most public libraries, these are provided by the same vendor and from the same interface. She notes "in 2009, well over eight thousand public libraries offered e-books and downloadable audiobooks."¹⁰⁰ Pawlowski also offers an excellent list of the advantages of digital collections, noting a not often mentioned point that digital collections can save a great deal of staff time as they do not require processing, or checking in and out.¹⁰¹ Digital collections are also very popular with users and have very high rates of adoption, particularly when they are discoverable through the OPAC.¹⁰² As vendors are a key partner in digital collections, most of the rest of this chapter is devoted to an overview of vendors, products, and licensing, with a section on formats, which makes interesting reading for those interested in technical aspects and the history of the various e-book formats. The tables with device and format compatibility are a valuable and easy to understand tool for working librarians, but staff using this resource need to be aware of the rapid changes in this area that may make these resources quickly outdated. This chapter concludes with a case study of Kindle use and loaning at a public library, which is a nice guide for libraries considering the loan of e-book readers.¹⁰³

The most recent reports in this area are the results of a survey conducted by *Library Journal* and *School Library Journal* as part of their 2010 Virtual Summit.¹⁰⁴ The public

libraries report begins with an overview of the rapidly growing e-book market, noting that the "annual growth rate of 71% is the highest of any book category," ten times higher than adult hardcovers at 1.3 percent.¹⁰⁵ In terms of library e-book collections, 72 percent of libraries currently offer collections, and "as for the 28% of public libraries that currently don't offer e-books, 32% plan to offer e-books in the next 12 months, while a further 28% plan to offer e-books in the next couple of years."¹⁰⁶ Clearly e-books are a format that are no longer a fad but an established format in public library collections. Libraries are adding these collections based mostly on consumer demand.¹⁰⁷ Libraries are also circulating devices. While only 5 percent of libraries surveyed currently circulate reading devices, as many as 24 percent of respondents are considering it.¹⁰⁸ Libraries are mostly likely to circulate the Sony Reader, which may be because of its compatibility with OverDrive collections, or Sony library marketing and outreach campaigns.¹⁰⁹

The LJ/SLJ report finds that public library e-book collections tend to circulate many of the same types of materials as print collections; the most popular materials are bestsellers, mystery/suspense, current events, and self help/psychology.¹¹⁰

The school libraries report's most interesting result is that "middle schools appear to be most receptive to e-books. Middle school students are most likely to have dedicated e-book readers, and they are most likely to make e-book requests. Middle school libraries also report that they expect a higher increase in e-book circulation."¹¹¹ Many of the other areas are similar to public libraries, while currently offerings are lower, most that do not currently offer e-books are considering it in the near future.¹¹²

E-BOOKS AND E-BOOK READERS INTERNATIONALLY

Studies of e-books and e-book readers outside of the United States and Europe are gradually increasing. In Ghana a large study is currently being undertaken on the feasibility of using Kindles for classroom and leisure reading. Results from the pilot study indicated that the Kindle was useful for assigned long form fiction reading in the classroom, and that students appreciated its similarities to the familiar technology of the cell phone.¹¹³ E-book adoption in China is so high that predictions about the demise of print culture may not be too far off.¹¹⁴ As many as 91 percent of participants said they would not bother buying a print version if they could get it digitally.

IMPLICATIONS FOR LIBRARIES

Readers' Advisory Services

Regardless of whether the readers' advisory services are performed in school, academic, or public libraries, they must move beyond printed fiction texts. Readers' advisory services need to continue to embrace nonfiction, making just as many

recommendations for nonfiction reading as fiction reading for patrons of all ages. Librarians providing readers' advisory services need to be familiar with nonfiction texts and know which ones are more likely to appeal to certain ages, sexes, or readers. If this paper is about audiobooks, e-books, and online reading, then why am I talking about nonfiction? Because audiobooks and e-books can just as easily be nonfiction as fiction when it comes to leisure reading. As a profession, I think we're making good progress in this area, but we've not yet fully acknowledged the power and importance of nonfiction reading.

Librarians need to start providing readers' advisory services for audiobook and e-book readers as soon as possible or we risk losing and alienating an entire generation of readers from the library. Starting at the level of the school library and with youth services librarians, readers' advisory services must also include audiobooks and e-books. All readers' advisory conversations must include questions about format—do you prefer to read in print, to listen, or read electronically? And at no point should the question indicate that one format is better than the other, although it is okay to admit that the library's collections may be limited in some areas. When giving suggestions during a readers' advisory transaction librarians must suggest both audiobooks and print books, especially if they think the reader might be struggling. For every reader who will ask for audiobooks, there are at least two who don't know the library has an audiobook collection. Another possibility is that the young readers know the library has audiobooks but they are in a format he/she can't access. Ask questions about access and format to find audiobooks for every reader. Audiobooks collections must be marketed through in person interviews as well as included in all displays and handouts designed for passive readers' advisory.

When it comes to online and e-book reading, libraries are not yet really prepared to work with this readership, but it's one that is too important to ignore. When one of your patrons gets a new Kindle or Nook, know which items in the collection they might be able to check out (if any) and have plenty of suggestions of other places for e-books, either for free or for purchase. Librarians need to make sure they are playing a valuable role in the e-book world, or they will become shut out, at least for the more affluent readers.

Patrons who own these devices need to be convinced to use library services instead of just relying on purchasing all their items. If your library completely lacks any e-books for circulation, at the minimum, be able to provide advisory services to help e-book readers find sites for free or low cost e-books, or help them pick through the dozens of sites and hundreds of thousands of titles offered online. As long as libraries are providing this type of valuable advisory services, they will not lose their patrons to the Internet and will have a ready base of readers when e-books are finally ready to circulate at the library. At the same time, libraries that do not yet provide circulating e-book collections need to start seriously considering their options as demand for digital library offerings will only increase.

What does this mean for librarians? It means learning all about the various e-book readers and e-book vendors. It means knowing about the sites that sell audiobooks and publishers who provide deals of e-books directly from their websites (i.e., Harlequin's recent \$1 e-books for their 60th anniversary.) Above all, it means that librarians can't ignore e-books or e-book readers if they want to maintain a patron base into the future.

E-BOOKS AND LIBRARIES: WHERE ARE WE GOING?

When it comes to e-books and collection development there is really only one thing to say—buy some! Few libraries have e-book collections of leisure reading materials that can be checked out for use on e-book readers or only have statewide collections with limited titles. As e-book readers (dedicated devices like the Kindle and tablets like the iPad) are both increasing in popularity and market share, libraries need to supply these materials in the formats that their patrons are already using before these patrons disappear forever. This is a new area in library services with limited options but it's one where librarians need to be the leaders; the library market is a large and powerful one that can influence publishers and vendors. E-book collections need to be investigated at both the local and state or consortium level—large group purchases can be useful for stretching budget dollars but make it difficult to customize for your local patron base.

A few libraries have started to circulate Kindles, preloaded with selected popular titles, and the results have been excellent.¹⁵ People want to be able to read e-books and experience reading on an e-book reader. Loading Kindles with titles that have long hold lists makes bestsellers available to a wider range of local patrons. This can also help in customizing local collections as in demand titles can be purchased for the library's own e-book readers.

Particularly in these difficult economic times when few library patrons will have the money to buy and then fill up an e-book reader, libraries need to jump in and fill this gap. Librarians in all libraries need to keep an eye on new developments in e-book readers, and e-book collections for library services, and be ready to work with all ages of patrons, answering device questions and providing advisory services.

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