Literacy & Technology
How Readers Benefit From Audio & Multimedia Books

AudioBooks

As an important component of a school's reading program, audiobooks allow students to read above their level and learn new vocabulary in the process. Students learn how to actively listen which builds their critical thinking skills. ESL students and struggling and reluctant readers especially benefit from the use of audiobooks.

- "In elementary and high schools, the use of recorded books has traditionally been limited to ESL students and children with particular problems in reading. . . . In this context, **audiobooks have become a bridge to reading** — a way for children to absorb literature at their own comprehension level while they address the mechanics of the decoding process." (1)

- "It is not that anyone disputes the need to teach children to read, of course; the need to read is thoroughly woven into the fabric of everyday living. But the **benefits of reading aloud to small children are well established**, and some educators think listening may be the missing link for older kids, too — a way to win over their hearts and minds to literature." (1)

- "…educators have found that **children can understand books read aloud at a comprehension level significantly above the level of books they can read** to themselves." (1)

- "By the end of that year, all 23 of the **kids in that reading skills class had come up about two grade levels in their reading** and all had better attitudes toward reading. Audiobooks made the difference for those kids." (2)

- "Good ideas are easy to discover when you begin to see lots of people using the same idea in several places and getting great results. And in lots of places **I was seeing teachers use audiobooks in their classrooms as an integral part of the reading program**. Plus, I was hearing city and school librarians tell me that a large part of their circulation came from audiobooks." (2)

- "Children still learning to read learn much about books, about print conventions, about vocabulary, about plot structures, about decoding from having books read aloud to them. As students get older, hearing text read aloud continues to help increase their decoding and comprehension abilities. . . . **The use of audiobooks with struggling, reluctant, or second-language learners is powerful since they act as a scaffold that allows students to read above their actual reading level**. This is critical with older students who may still read at a beginner level." (2)

- "…the students I've observed and teachers I've interviewed have shown me that listening while you read has proved an effective way of changing attitudes toward reading and improving reading ability for some students. **If creating lifetime readers is the goal, then every tool is needed — audiobooks are one such powerful tool**." (2)

- "Children who listen to a book being read while following along with the printed text can both see and hear new words, and the new words are more likely to be remembered. If a book is a bit above a reader's current level of reading, an audiobook presents the correct pronunciation, the book shows the correct spelling, and the context reveals the meaning. Therefore, **a solid bridge is created for learning new vocabulary**." (3)

- "**Audiobooks encourage active listening and critical thinking skills** — skills necessary for reading comprehension." (3)

- "Audiobooks have traditionally been used in schools by teachers of second-language learners, learning-disabled or –impaired students, and struggling readers or nonreaders. In many cases, **audiobooks have proven successful in providing a way for these students to access literature and enjoy books**." (4)

- "Many students around the world are avid readers, while others are struggling to become readers and still others have given up hope. **Audiobooks have something to offer all of these students** — to meet them wherever they are and bring them along on a wondrous journey. Audiobooks can be a welcomed addition to every classroom. As a matter of fact, most students will find them to be simply ear-resistable!" (4)

- "Exemplary audiobooks can enhance learning and help teachers and students to replace memorization with meaning. We now know that **involving multiple senses increases learning and retention**." (5)

- "…one of the most important reasons for the increasing interest in audiobooks for young people is the research demonstrating that **listening to audiobooks fosters reading comprehension, fluency, language acquisition, vocabulary development, and improved achievement**." (6)

- "The research that documents the importance of reading aloud with primary-, intermediate-, and middle-grade students is compelling. Reading aloud to young and older readers alike introduces new vocabulary and concepts, provides demonstrations of proficient reading, and allows young children access to stories that they are unable to read on their own or that they might not choose for themselves. Research has also shown that reading aloud with children provides the foundation for their development as readers and that **audiobooks are an important component of a comprehensive reading program**." (7)

e-Books & MultiMedia Books

Electronic and multimedia books are a powerful resource to reach students with different learning styles. These teaching tools support and extend student learning.

- "**Technology has the advantage of reaching students with different learning styles** and incorporating visual and audio elements." (8)

- "…**the potential of electronic books as a teaching tool was not overlooked by the educators** at both the secondary and higher education levels. Multimedia textbooks, texts hyperlinked to a bilingual dictionary to assist 'English as a second language' students, and synchronized audio and text to aid with low reading comprehension are all possible classroom applications of ebooks." (9)

- "**There is a place in the school classroom or library for electronic storybooks**. . . .The results of our reading comprehension showed that there is no detrimental effects to pupils in terms

of reading comprehension, motivation to read further, or enjoyment of the story, if they are reading from an electronic storybook compared with its printed equivalent. . . . Additional functions that may be found on some CD-ROM storybooks or downloaded stories, for example, a dictionary, pronunciation of individual words, or narration of text, may particularly benefit struggling readers." (10)

- "…**electronic books possess a number of important advantages**, at least from an instructional point of view." (11)

- "Enhanceable means that resources designed to enhance text use and comprehension can be embedded into an electronic book by the developers or by teachers. These resources might be designed to support students' understanding of the text (e.g., definitions, explanations, pictures) or extend their learning (e.g., background information, primary source material, links to related documents). By supporting students' literacy skills, embedded resources can also help students with diverse learning needs achieve success in their efforts to read and learn from electronic books. . . . **The presence of embedded resources in electronic books has tremendous potential for improving students' comprehension and promoting in-depth learning**." (11)

- "Today we are excited about multimedia in education. But what we often mean is simply that a computer display can show students moving pictures with sound. **Interactivity is an important additional component**." (12)

- "One of the most intriguing examples of advantageous use is the ability of CD-ROM storybooks to set a mood and context for a story in a highly appealing manner. They can also **support struggling readers' initial attempts at unfamiliar vocabulary**." (13)

- "McKenna concludes that talking books alone will not teach children to read. Rather, he says that talking books may provide an **opportunity for aided practice of skills that beginning readers learn from direct, systematic instruction in word decoding**." (14)

- "Electronic reading produced experiences and effects similar to adult-read printed books. Children frequently interacted with the animations often embedded in electronic stories, but there was no evidence that the animations distracted children from listening to the text presented by electronic books, nor that the animations interfered with story understanding. Findings suggested that **children at this stage of development profited from electronic books** at least when electronic books are read in a context where adults also read books to children." (15)

- "…there appear to be many students who benefit from the addition of multimedia instruction to a conventional curriculum. One example that was tested in several studies was the addition of speech (computerized or not) to the instructional context. **When multimedia software is available and appropriate, it should be exploited**." (16)

- "In general, **electronic talking books have been found to support reading instruction** by providing background information, extended response actions, play actions, and explanatory notes. Talking books also show promise of accelerating reading growth by offering readers immediate access to a word's pronunciation — thus easing the need of the student to rely on context cues to understand new words." (17)

- "A number of **studies at different grade levels have found positive impact on students' vocabulary learning** to result from the use of electronic talking books and electronic texts with scaffolds to support vocabulary development." (18)

- "…the flexibility and growing power of computers make them useful skill development tools. **They have many advantages over printed materials and can help teachers give students the necessary individual attention.** Multimedia features including sound, animation, video, and record/playback allow computers to model skills as well as help students and teachers assess them. The option to provide guidance only when needed makes it possible for computers to support learning flexibly." (19)

- "Software that can **engage students in learning to read**, rather than in playing with the software, takes advantage of the flexibility of the computer to provide support, encouragement, and interest appropriate to individual students. The best software uses the various capabilities of the computer to support reading skills and help students discover the pleasures and rewards of reading." (19)

Closed Captioning on TV

New research credits closed captioning on television with higher literacy rates. Studies have shown that children who read subtitles while they watch TV have a larger vocabulary and greater understanding of the content.

- "Because of its newness, research is just beginning with captioned TV but there is enough to indicate significant gains in comprehension and vocabulary development (especially among bilingual students) when receiving instruction with educational television that was captioned. Since we know children easily learn to read words from pages or product labels when they see the words and simultaneously hear the parent say the words, it appears that **reasonable doses of captioned television can do no harm and most likely help with reading**." (20)

- "The latest research studies on the benefits of using CCTV [close captioned television] with second language learners of all ages continue to confirm the findings of earlier years. **Students using captioned materials show significant improvement in reading comprehension, listening comprehension, vocabulary acquisition, word recognition, decoding skills, and overall motivation to read**." (21)

References:
(1) Varley, Pamela. "As Good as Reading? Kids and the Audiobook Revolution." Horn Book Magazine, May/June 2002.
(2) Beers, Kylene. "Listen While You Read." School Library Journal, April 1998.
(3) Marchionda, Denise. "A Bridge to Literacy: Creating Lifelong Readers Through Audiobooks." AudioFile Magazine, August/September 2001.
(4) Johnson, Denise. "Audiobooks: Ear-resistable!" Reading Online, April 2003.
(5) Locke, Deborah. "The Audio Time Machine." Book Links, June/July 2002.
(6) Grover, Sharon and Lizette D. Hannegan. "Not Just for Listening: Integrating Audiobooks into the Curriculum." Book Links, May 2005.
(7) Serafini, Dr. Frank. "Audiobooks & Literacy: An Educator's Guide to Utlizing Audiobooks in the Classroom." Listening Library, Random House Inc., 2004.
(8) Cohen, V.L. "Learning Styles in a Technology Rich Environment." Journal of Research on Computing in Education, 1997, 338-350.
(9) Gibbons, Susan. "Ebooks: Some Concerns and Surprises." Portal: Libraries and the Academy, 2001, Vol. 1, No. 1, 71-75.
(10) Dungworth, Naomi and Dr. Shirley Grimshaw, et al. "Electronic Books: Children's Reading Practices and Comprehension." School Libraries in View, Chartered Institute of Library and Information Professionals School Libraries Group, Issue No. 19, Spring 2004.
(11) Anderson-Inman, Lynne and Mark Horney. "Electronic Books: Reading and Studying with Supportive Resources." Reading Online, www.readingonline.org, April 1999.
(12) Bertram, Bruce. "Constructing a One-and-Future History of Learning Technologies." Journal of Adolescent and Adult Literacy, International Reading Association, May 2001.
(13) Lefever-Davis, S. and C. Pearman. "Early Readers and Electronic Texts: CD-ROM Storybook Features That Influence Reading Behaviors." The Reading Teacher, February 2005, 446-454.
(14) Smart Library on Literacy and Technology, North Central Regional Educational Laboratory. "Using Electronic Books with Beginning Readers: Perspectives and Research." www.ncrel.literacy.smartlibrary.info.
(15) DeJong, M.T. and A.G. Bus. "The Efficacy of Electronic Books in Fostering Kindergarten Children's Emergent Story Understanding." Reading Research Quarterly, Octover/November/December 2004, 378-393.
(16) National Reading Panel, Reports of the Subgroups. "Teaching Children to Read: An Evidence-Based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading Instruction." April 2000.
(17) Holum, Ann and Jan Gahala. "Critical Issue: Using Technology to Enhance Literacy Instruction." North Central Regional Educational Laboratory, October 2001. www.ncrel.org.
(18) "Technology and Teaching Children to Read." Northeast and the Islands Regional Technology in Education Consortium, Education Development Center, 2004. www.neirtec.org/reading_report
(19) Meyer, Anne and David Rose. Learning to Read in the Computer Age. Brookline Books, 1999. www.cast.org/publications/books/ltr/index.html.
(20) Trelease, Jim. Excerpt from The Read-Aloud Handbook, 2001. www.trelease-on-reading.com.
(21) Parks, Carolyn. "Closed Captioned TV: A Resource for ESL Literacy Education." ERIC Digest, ERIC Clearinghouse for ESL Literacy Education, July 1994.