The Use of e-Books and e-Readers in School Libraries

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Introduction and Scope

The following bibliography covers the selection and use of digital materials and their corresponding hardware and software with which to view the documents, and the possible effects on reading with K-12 students. The selected articles span the years from 2003 to 2011 and touch on the inclusion of these e-books in school libraries, preferences of users for e-books, and the tools that are needed to view the digitized text. Several articles deal with user selection and use of e-books over the printed word and how reading is impacted for these users. There is a history of the developing definition of the term “e-book.” Some of the articles discuss in various ways the need for a clear definition of what an e-book encompasses and the software standards that are needed when the e-book is defined as the electronic device whereby digitized text is read. The focus of this bibliography is on K-12 student users, but a few others are included due to the lack of studies in the field of e-books and how they are used by students at this level.

Description

School libraries are facing a dynamic change in this age of electronic tools for learning. Some districts are eliminating library programs, as well as certified library staff. Budgets are being cut in many types of libraries, so electronic books seem to be a natural response to helping to stretch the library budget as well as give students access to quality materials, especially in smaller school libraries. Quality materials are crucial in shaping the literacy development of children. This requires reading engagement which is “positively affected if there is high-interest material available for children.” (Jones, 2011). This high-interest material can come in the form of an e-book. With differing opinions about the technology of the e-book, Vassiliou and Rowley seek to determine a definition and expressed it in two parts: “a digital object with textual and/or
other content” and the e-book reader or appliance with in-use features and technology. (Vassiliou, 2008). The e-book is becoming another tool for reading and information gathering.

**Summary of Findings**

From 1945, when Vannevar Bush developed a device called the “memex” that integrated a variety of resources into something like the format of today, electronic reading materials have been evolving. E-text (data in an ASCII text format) evolved into a file that is a digitized book, magazine or newspaper, and then the book format that we are familiar with today was added. (Chen, 2003). “E-books represent a logical step on the timeline of publishing and the evolution of digital collections.” (Anuradha, 2006). However, some users are uncomfortable with this evolving format, but “there have always been disruptive technologies developed to move society beyond what is comfortable” in order to make life better and more efficient. (Carreiro, 2010).

However, the mere definition of the electronic book format has sparked much debate about what actually characterizes an ebook with all its advantages and disadvantages. Many comparisons have been made between the traditional “publication composed of text and bound into a physical carrier, such as in a paper format” (Chen, 2003) and the electronic version which can be described from the point of view of the content or the point of view of the device on which the content is read. Rao states that in trying to define what the e-book is, four perspectives have evolved: (1) *ed*, another electronic form or digital object; (2) *content*, content not tied to a physical object; (3) *dev ce*, the equipment that related to computer hardware or software; and (4) *de very*, publication on the web or over a network. (Rao, 2005). Bringing all these perspectives together, Vassiliou and Rowley devised a definition that includes aspects of two points of view in order to provide a practicable expression of e-book:
An e-book is a digital object with textual and/or other content, which arises as a result of integrating the familiar concept of a book with features that can be provided in an electronic environment. E-books, typically have in-use features such search and cross reference functions, hypertext links, bookmarks, annotations, highlights, multimedia objects and interactive tools. (Vassiliou, 2008).

With this definition, they are defining the format using the text or content and the technology. While discussing the impact of the e-book on the publishing industry, Carreiro agrees that a “two-part definition is necessary to capture” all the attributes of the concept. (Carreiro, 2010).

With all this discussion about the definition of the e-book, there is a statement about the technologies that are needed to actually read the digitized text. The publishing industry is concerned about the format that will best suit its customers and have yet to agree on a standardized format that will suit all situations. The biggest argument from their point of view is whether or not it should be printed or electronic. How long should paper books be printed so the user can curl up with a good book? or will the user easily adapt to an e-reader?

In 1999, a standard form and structure by which publisher-created documents can be read was established with Open eBook Specification OEB 1.0. Some problems were that it would not support non-OEB formats and did little to address copyright protection or digital rights management. Piracy is one of the biggest challenges in the publishing industry. Publishers are cautious and want tight digital rights management which also hinders the growth of the e-book. (Carreiro, 2010). Publishers are ready for a digital strategy and writers need to think of creating their work digitally because they are authoring content not just developing a book. This is a process change, a mind shift which embraces a whole new content development process. (Carreiro, 2010). E-books offer us a new way to read which can alter our reading and information sharing habits. This change will affect our intellectual lives and could have the potential to “raise national literacy and educational standards.” (Carreiro, 2010).
With the standardization of publishing strategies, we could see a more uniform device software that will be interoperable and allows us to share books, borrow books and read books on more than one device like we do with paper books. Anuradha and Usha did a comparative study regarding access models, or reading devices. They determined that there were four ways of using them based on content, format, mode of access and devices. (Anuradha, 2006). The devices include the standard PC with book reading software installed, PDAs or handheld computers, and the specific devices used for e-books. Since this study was conducted, Amazon’s Kindle and other dedicated e-readers have become more popular for reading e-books by adults. In one study, children were asked to help determine what type of reader they would prefer in order to access and read digital stories from the International Children’s Digital Library (ICDL). During the experience of children accessing the e-books, they were questioned about the type of reader interface which would serve them better. It was found that “different children prefer different types of readers.” (Hourcade, 2003). In one college preparatory school in Massachusetts, the Kindle was one of two readers provided for students to access and use the school’s library resources. In 2009, almost the entire library collection of the school was changed over to digital copies and the academy provided e-readers to students for access. However, just a fraction of the academy’s collection would fit on the e-reader and then only if they were the correct version, for either the Kindle or the Sony Reader. (Medeiros, 2010).

This not only raises the question as to access and use of the total collection, but what would be the impact on the information literacy and reading skills of these students? High school students are using the technology tools to communicate with each other and for leisure reading, but the impact on their learning skills cannot be guaranteed just by changing a library collection from print to digital. Medeiros suggests that at this time the electronic book is a “complement to
print, not a replacement,” and they are “not yet an acceptable substitute for the tried and true print monograph.” (Medeiros, 2010).

The impact on reading and learning has been the subject of many studies and these studies indicate that more is needed in the way of research to determine if there is a correlation between the e-book format of book and success at reading. Maynard conducted a small pilot study to “consider the reading experiences of young children and their families.” (Maynard, 2010). “Reading is an integral part of the way we learn and it is important to understand how best to encourage children to read for enjoyment” (Maynard, 2010). as well as for information gathering. Studying the reading experiences of three families with three different e-readers for each family, Maynard found that all participants enjoyed reading with the electronic devices. A reluctant reader in one of the families was found to be more enthusiastic about reading using the device than reading a paper book. With the device, he would choose to read rather than watch television. (Maynard, 2010). However, it is important to note that the author indicated that more studies similar to this one would be needed to see if other results supported her findings.

Hourcade’s study using the International Children’s Digital Library (ICDL) was primarily about the user interface, but it also indicated that the ICDL was an ideal way for students to have access to “diverse international literature limited despite the best efforts of librarians, teachers, and parents.” (Hourcade, 2003). Reuter’s study about children’s book selections in a digital library shows that it is “a complex process with many factors at work.” (Reuter, 2007). Her study used the ICDL as the resources to examine “book selection for recreational reading as a process of relevance assessment that centers on the concept of aesthetic relevance” on the part of the child at the elementary school level. (Reuter, 2007). It was found that children were engaged in the activity the most when they had access to full text and images
from the books. Children did routinely look at a number of pages when they accessed the Book Preview. Even with all of these choices, reading engagement and enjoyment were still found to be more important than reading for understanding. (Reuter, 2007).

Shrimplin used the Q methodology to find the use preferences of patrons in academia. After the study was completed, four factors emerged to illustrate the strong preferences that users have when using printed and electronic books and were labeled: Book lovers, Technophiles, Pragmatists, and Printers. Each had their own preferences when selecting and using either the print or electronic format for getting information or leisure reading. (Shrimplin, 2011). The overall consensus was that those reading for leisure still preferred the printed format.

Librarians need to be as much aware of these four groups as they are about how to help users access and use materials in the collection. Slater’s study demonstrates that if print versions are not available, “it is likely that many print users would turn to the electronic equivalents.” (Slater, 2009). E-books continue to be developed and standards will be better outlined for reading devices, but there is also a need to understand that we all (publishers, writers, users and librarians) are in a transition between the total paper-printed book collection and the total electronic book collection. It will not happen overnight or in a few years.

**Abstract:**
Though electronic books (e-books) are not new, they are slow in their uptake compared to other types of e-publications such as journals, newspapers. The possible reasons for this could be because the technology for creating/accessing e-books (both hardware and software) is not yet matured. However, the recent involvement of many commercial publishers and aggregators in publishing and marketing of e-books has triggered their use. This trend suggests making an analytical comparative study of the e-book access model. The main purpose of this study is to analyze and compare offline and online e-book access models.

**Design/methodology/approach**
In this paper an attempt is made to analyze and compare three offline and three online e-book access models by identifying various specific e-book access model features. The access models are evaluated based on a three-point scale.

**Findings**
It is observed that among offline access models Microsoft Reader has most of the features well defined and among online access models, Ebrary has most of the features well defined.

**Originality/value**
Many publishers and aggregators have started producing and marketing e-books using different types of access models. There are several access models available and each one has its own merits and demerits. However, there has been no study carried out in comparing and analyzing these models. Hence this study is useful for all the stakeholders of e-book industry viz., creator (author), publisher, aggregator, librarians and users of e-books.

**Annotation:**
E-books are not new but this format has been slow on being accepted in book publishing. It is a logical step in the timeline of publishing and the evolution of digital collections. Even with the technologies not being stabilized as to compatibility and interoperability, an evaluation was needed to compare and contrast the existing devices. An ebook needs be able to access text and other book deliverables and the device provides this accessibility. A comparative analysis was done with three popular e-readers to rate their operability and readability, not to determine which was best, but to illustrate the strengths and weaknesses in each. This is helpful when schools and other organizations need information to determine which e-reader is best suited to their users, if they are to provide these devices.

**Authority:** Anuradha, K. T. is one of the Technical Officers, Gr. III at the National Centre for Science Information, at Indian Institute of Science, Bangalore, India which provides electronic information services to the Institute academic community. The Centre also undertakes sponsored R&D projects and conducts a training program on Library and Information Management. The vision of this center is to provide seamless, network access to resources to those at the center, provide training to those at the center to make effective use of the electronic sources, tools and services, and conduct teaching, research and training in Library and Information management with focus on digital information facilities and services. H. S. Usha is a Project Assistant at the same center. This paper is an outcome of project work entitled “e-books access and use models: an analytical comparative study” which is part of her training program to be part of “Information and Knowledge Management” at the National Centre for Science Information.

**Scholarly/Refereed Status:** *Electronic Library* is an academic journal that is published bi-monthly, in English, and is refereed. According to Ulrichsweb, this publication is devoted to the applications and implications of new technology, library automation, user interfaces, and networks on libraries and information centers worldwide. It provides an international appraisal of current library trends and emerging patterns for the future.

**Search Strategy:** I needed to use other databases to get other perspectives and broaden the base of my searching. For this search, I decided to go with ProQuest Research Library and then selected the Science and Technology, and Business parts of it. I used controlled vocabulary to get the format (electronic books) and limiting it to “research or study” in the abstract field.

**Database:** ProQuest Research Library

**Abstract:** This paper explores the topic of electronic books (e-books) and the effect that these digital devices and other new technologies have on the publishing industry. Contemporary society often claims that the publishing industry is dying and that the innovation of the e-book will eventually sentence the printed book to death. But this study will show that such is not the case. While it is true that the world is undergoing a digital revolution, publishers today have not been left in the dust, because these firms have embraced electronic publishing (e-publishing). The invention of e-books opens a world of opportunities and since the e-book market is still in its growth stage, there is much work left to be done. As with any new venture, the industry faces certain challenges, such as piracy, but with tools like encryption, digital asset management (DAM), digital rights management (DRM), and digital object identifiers (DOI), publishers are well on the way to a solution. While it is safe to say that the digital revolution has forever changed the face of publishing, e-books could actually revitalize the industry. No one knows what the future of e-publishing will hold, but developments affect publishing houses, authors, and consumers alike. And while the ultimate fate of the printed book is yet unknown, for now, it is here to stay.

**Annotation:** The ebook is making changes in the publishing industry and has caused the greatest transformation since Gutenberg created his printing press. Much discussion continues about the definition of the ebook as well as how that definition applies to the e-reader. This article takes on the impact on the publishing industry and how it has been changing their strategies to accommodate the changes. Topics discussed include developing standards for adoption of electronic publishing, encouraging interoperable implementations of publications and providing a forum for discussing issues and new technologies that impact the publishing industry. Digital rights management (DRM) will continue to be a challenging topic with authors, publishers, editors and others that are involved in the creation of new documents. As this format develops, publishers will be concerned with piracy, copyright infringement and any lawsuits from either of these problems. However, the e-books enables more reading, which leads to better reading which has the potential to raise national literacy standards.

**Authority:** Erin Carreiro is limited attended Quinnipiac University in North Haven, CT, but searching the university’s website, I found no further information about her. After submitting a search on Google, I found that she is currently in the marketing department for Eye On Education which is an independent, innovative provider of resources for the educational community. This organization provides information on professional development, educational leadership, school improvement and other topics.

**Scholarly/Refereed Status:** According to UlrichsWeb, the *Publishing Research Quarterly* is a refereed academic journal that is published quarterly. It covers the publishing environment and provides analysis of the content development, production, distribution, and marketing of books, magazines, journals, and online information services in relation to the social, political, economic, and technological conditions that shape the publishing process.

**Search Strategy:** I realized that I had retrieved much in the way of well referenced journal articles, but needed more about the studies and research done in the area of e-books and their practical application. In essence, I decided to go at it again trying to use other databases to get other perspectives and broaden the base of my searching. I decided to go with ProQuest Research Library and then selected the Science and Technology, and Business parts of it. I used controlled vocabulary, after searching the thesaurus for terms, to get the format (electronic books) in school libraries and limiting it to “research or study” in the abstract field.

**Database:** ProQuest Research Library
Abstract: Since Gutenberg invented printing in the fifteenth century, the book has become one of the most important information carriers for knowledge distribution, academic research, cultural heritage, and preservation. With advancements in technology both of electronic publishing and universal distribution and access on the Internet, the electronic book is supposed to become another revolution for information dissemination. This paper examines electronic books by giving a review of their historical development, definition and scope, characteristics and constraints, typology, related issues for library services, and user preferences. Consequently, this paper finds that electronic books only bring several evolutionary changes to the current operations of publishing and distribution in comparison with traditional books. The electronic book is just as much a consequence of the application of innovative information technologies as Gutenberg’s were for paper books. A revolutionary change is still required for the electronic book to become ubiquitous.

Annotation: The article compares and contrasts the traditional printed book with the evolving electronic book which has a computer software or separate hardware reading device. The author first offers an historical perspective of the electronic book, reviewing the ideas of the electronic book as far back as 1945. Secondly, the ebook is defined and its characteristics and constraints are discussed. The last two topics about e-books look at the library’s introduction of these books into existing services, and the user’s preference for electronic books is also addressed. At the time that this article was written, electronic books still simulated the traditional paper book and were just an electronic version of same. Chen’s viewpoint as a system’s analyst shows creation of the ebook, its storage and dissemination, while considering the needs of the end user when using this new technology in a library setting.

Authority: Ya-ning Chen is a systems analyst at the Computing Centre, Academia Sinica, Nankang, Taipei, Taiwan, Republic of China. In writing the article, Chen takes a systems analyst’s point of view of electronic books looking at the delivery and storage of digital or electronic books and how it works in the changing field of library and information services.

Scholarly/Refereed Status: The On ne nfor t on c is an international academic journal that concentrates on the topics of online information sources, systems and service, as well as information technology and the World Wide Web. It also deals with how information is held in storage on magnetic and optical media. It is published six times a year and is peer reviewed. UlrichsWeb also adds that it is a journal that “focuses on information retrieval on the internet and ensures that librarians and information professionals are kept up to date with the latest developments in this rapidly changing field of research.”

Search Strategy: After reading an article by Siriginidi Subba Rao about electronic books, I looked through the footnotes for additional information. Since I needed the full text and more information about the development of e-books, I selected this one and entered the title to search LLIS to locate the article which covers the subject area of library and information studies. I was then able to check the scholarly status of the journal in the same database and verified it through Ulrichs.

Database: Library Literature & Information Science Full Text (H.W. Wilson)

Search Method: Footnote chasing

Search String: TI=Application and development of electronic books in an e-Gutenberg age.

**Abstract:** Reading books plays an important role in children's cognitive and social development. However, many children do not have access to diverse collections of books due to the limited resources of their community libraries. We have begun to address this issue by creating a large-scale digital archive of children's books, the International Children's Digital Library (ICDL). In this paper we discuss our initial efforts in building the ICDL, concentrating on the design of innovative digital book readers.

**Annotation:** This article discusses the results of a study that supports the development of electronic books to help children become literate in today’s society. As the ICDL for a resource, the driving force behind this pilot study is to help students have access to diverse international literature which is usually not found in the traditional school library or classroom. Indicating that most e-readers which would access the e-books in the ICDL are designed for adults, the need for a user interface that is appropriate for young children is studied with a small sample of students, ages 5 to 11. The children helped with the design of three different readers: standard reader (seeing only one page at a time), comic strip reader, and a spiral reader. Further design and testing will be needed to help children make the most out the diverse collection of literature from the world’s authors.

**Authority:** Juan Pablo Hourcade is an assistant professor in the Computer Science Department of the University of Iowa. His main area of research human-computer interaction with a concentration on the design, implementation and evaluations technologies that support information access for children and older adults. He is active in the research community searching as chairperson for many activities, including a workshop titled Interactive Technologies for Children with Special Needs.

**Scholarly/Refereed Status:** The journal, *Interacting with Computers*, is published to foster communication between academic researchers and practitioners, encourage the flow of information across contributing disciplines and stimulate ideas and discussion with a perspective on the future. According to Ulrich’s, it is an academic/scholarly journal and is refereed.

**Search Strategy:** This was one of my initial searches so I selected SciSearch in Dialog because it deals with computer applications and I was just looking for general information about digital libraries. I also searched for methods of books selection which would apply criteria to either the librarian or the patron (particularly children) selecting books. I included this article since it illustrates an attempt to help children select books from an established digital library.

**Database:** Library Literature and Information Science [Dialog]

**Search Method:** Keyword search with “digital libraries”

**Search String:** ?s electronic()books  
?s book()selection  
?s digital libraries


**Abstract:** Electronic books (e-books) are gaining popularity for personal reading. Options for access to a large selection of book titles and “anytime/anywhere” reading choices have added to the increased use of e-books. For this study, 22 third-grade students completed satisfaction surveys and reading comprehension tests on three separate reading sessions: one traditional print-based and two ebook titles. Indicators of reading engagement included motivation for independent reading and comprehension as measured by standardized tests on the print book and both
e-books. Results showed that format was not as important as students’ identification with setting, characters, and theme of the book. Students did, however, indicate a preference for e-books when given the option of a wide selection of titles and the freedom to choose their own ebook. Students further indicated a preference for the amenities associated with ebook reading such as pop-up definitions and pronunciations of words, automatic page turning, and the option of read-aloud narration. The authors concluded that children quickly become comfortable with e-books and welcomed the technology. However, they are not completely ready to disregard print books. (Contains 5 tables.)

**Annotation:** This article begins to address the effects of the formats of books (traditional paper vs e-books) on reading comprehension and overall reading pleasure in children. Reading engagement is discussed as an important part of a student’s literacy development. Electronic books are seen as another way of developing this literacy as used from online websites or electronic devices. Access to e-books is seen as another way of delivering books for research or enjoyment while developing those 21st Century skills that will be needs in the future. The process was well documented, but it was deemed that further studies would be needed to support or nullify the findings of this small sample in the K-12 schools. The study concluded that the quality and quantity of books for children to read were very important, as well as the freedom to select their own books so that more profound reading engagement will help them with higher reading achievement.

**Authority:** Troy Jones is an Assistant Professor, Curriculum and Instruction Department (Elementary Education), College of Education at East Carolina University. Carol Brown is an Associate Professor, Mathematics Science and Instructional Technology (Instructional Technology) College of Education at East Carolina University.

**Scholarly/Refereed Status:** International Journal of Instruction is an academic/scholarly journal according to Ulrich’s Website of Periodicals. It is accessed not only through ERIC, but also through the Education Research Complete and Education Research Index databases available through EBSCOhost.

**Search Strategy:** I used ERIC from the DialogWeb interface. ERIC is a database that stores articles and other information about education. I felt that just using “electronic()books” in this database would produce information about e-books in an education setting.

**Database:** ERIC [DialogWeb]

**Search Method:** Controlled vocabulary

**Search String:** SU=electronic()books


**Abstract:** This article reports on a pilot study which aimed to consider the ebook reading experiences of young children and their families, with currently available portable e-reader devices: Amazon Kindle, Nintendo DS-lite and Apple iPod Touch. Three families, each with two children in the 7-12 year age range, experienced an e-reader for a two-week period. They recorded their experiences in a diary and were interviewed at the beginning and end of the study. Key findings include the fact that, of the six children involved, four rate themselves as 'enthusiastic' readers, one 'average' and one 'reluctant'; whilst all six of the parents enjoy reading. At the end of the study, all of the participants chose the Kindle as their preferred device and found it the easiest to use. In addition, there were indications that the one reluctant young reader (a boy aged eight years) was inspired to read by the Kindle. His parents were pleased with this enthusiasm, noting that he was reading rather than watching television, excited by downloading and choosing books and it was the only time they had known him to ask to read voluntarily. When asked whether they prefer printed or electronic books, all of the adults chose printed books, whilst the children were more ambivalent, with half preferring electronic books. [ABSTRACT FROM AUTHOR]
Annotation: This article reports on the results from a pilot study using three families who were asked to read traditional books and electronic books. The electronic books were read from three different devices. Maynard introduces the study by citing other studies that have supported the need for engaged reading by children, either independently or with family members, to establish a positive attitude about reading. Families were involved because of the need for adult reading to model that children should be engaged in reading and develop reading skills so that they will be more successful later on in life. With the results of the study, the author concluded that children had a preference of reading text when using an electronic device and seemed to stay engaged with the text longer. This study has provided a basis upon which more wide-ranging and substantial research can be completed.

Authority: Sally Maynard is currently a lecturer at Loughborough, Leicestershire, England for the Department of Information Science. Her research interests include children’s literature and librarianship, electronic publishing, children’s reading habits, and children and the changing media environment. Her current research includes “an analysis of a large-scale study of children’s reading habits and a study of six successful primary school libraries. She authored many publications in these fields and is a member of the Chartered Institute of Library and Information Professionals, an editor for ECL, a story of Ed. c. t. on nd ch dren’s L ter yre.

Scholarly/Refereed Status: According to EBSCOhost, the Publishing Research Quarterly is an academic journal on subjects about the book industry which is published four times a year and is peer reviewed. It features research on or about books, the publishing and book distribution process, and the social, political, economic, and technological conditions that help shape this process.

Search Strategy: I selected LISTA to get more variety in the sources that I was selecting for my topic. I used controlled vocabulary for electronic books and school libraries to find other resources for depth in these areas.

Database: Library, Information Science & Technology Abstracts

Search Method: Controlled vocabulary

Search String: SU=electronic books AND SU=school libraries

Medeiros, N. (2010). Books, books everywhere, but nary a one in print. OCLC yste s nd erv ces, 6(1), 5-7. doi:10.1108/106507510111018446

Abstract: Purpose - This paper seeks to review Cushing Academy's recent decision to withdraw the majority of its print book collection in favor of electronic books. Design/methodology/approach - The paper is designed to conjure thoughts regarding the role of books and their digital future, particularly in light of the Kindle and Google Books project. Findings - The paper suggests that eliminating print books from a secondary school library may not serve well students who go on to attend universities where print books predominate. Originality/value - The paper calls attention to the challenges libraries and institutions face in transitioning to electronic books.

Annotation: A college preparatory school in Massachusetts has announced that it will discard the 20,000 books in their collection and replacing them with digital copies. The article discusses how headmaster feels that this transformation of the library collection will make better access to books for students and feed into the electronic tools that teenagers are using to interact with information. The author also points out the problems of getting the electronic copies for the collection that will comply with current tools for reading books, namely the Kindle. Questions are raised as to whether or not the students are ready to make this move. Results from other studies show that moving to total electronic versions of books does not guarantee that students will use them more.

Authority: Norm Medeiros is an Associate Library and Coordinator for Collection Managements and Metadata Services at Haverford College. He has also served as the Coordinator for Bibliographic and Digital Services at the
college. He is the author of a column that appears quarterly in the *OCLC Systems and Services* journal. His research interests include electronic resources, metadata harvesting and the changing role of technical services administrators.

**Scholarly/Refereed Status:** After locating the article using the following steps, the article as also located after checking through LISA for peer reviewed journals, such as OCLC Systems & Services in which this article was found. Ulrich’s lists it as an academic/scholarly journal and that it is refereed. The journal’s website states that submitted articles that are deemed worthy to be published are “sent to two independent referees for double blind peer review” and the accepted, revised or rejected by the Editorial Board members.

**Search Strategy:** I selected Social SciSearch because of its wealth of articles related to information and library science as well as school libraries. I used keyword search terms with proximity connectors to focus on school libraries and electronic books.

**Database:** Social SciSearch [Dialog]

**Search Method:** controlled vocabulary

**Search String:**

? S1 12581 SCHOOL LIBRARIES  
? S2 1288 ELECTRONIC BOOKS  
? S3 11 S1 AND S2


**Abstract:**

*Purpose* – To highlight the salient features of e-books, challenges that arise in integrating e-books into library and information centers (LICs), e-books business models and licensing, and future of e-books.

*Design/methodology/approach* – Discusses the emergence of e-books and a comprehensive definition for them. Lists various implementations of e-books, their advantages and disadvantages in LICs and compares select e-book reader hardware and software with their specifications, requirements and characteristics.

*Findings* – Examines several issues to integrate e-books into LICs to find workable solutions based on identification, selection, circulation, maintenance, quality assurance, pricing, fair use, standards and interoperability, business models and licensing.

*Research limitations/implications* – E-books are a new convergence of various traditional works and functions based on the application of new information technology.

*Practical implications* – The issues causing concerns to users and LICs can be sought by collaborating with industry to ensure LICs play a continuous role in communication information and act as repositories of knowledge, for the benefit of society.

*Originality/value* – This paper offers practical solutions for LICs in integrating e-books in their collection.

**Annotation:**

Technologies are expanding and becoming more easy to use so public acceptance of e-books is growing. Academic libraries are ready to accept this type of book since they are already using a lot of resources that are digitized. Information is a commodity that is dispensed by libraries so users will use the ebook and other materials to build knowledge in their own lives. The discussion focuses on the need for a clear definition of ebook whether it be formed from its content, format or the reading device. Beyond the definition of the e-book, there are advantages and disadvantages for having e-books in library collections. The future of e-books are tied to the range of books available limited by security and commercial imperatives, and functionality. These two things will drive ebook adoption for libraries, and ebook technology has a long way to go before we have the readability and richness of traditional books.

**Authority:** Siriginidi Subba Rao is the Deputy Director and Head of Information Technology at the Central Leather Research Institute, Adyar, Chennai, India. He has authored many papers dealing with computer technologies
and electronic books. His research interests include knowledge acquisition techniques and information
communication technology.

**Scholarly/Refereed Status:** *The Electronic Library* is an academic journal that is published bi-monthly, in
English, and is refereed. According to Ulrichsweb, this publication is devoted to the applications and implications of
new technology, library automation, user interfaces, and networks on libraries and information centers worldwide. It
provides an international appraisal of current library trends and emerging patterns for the future.

**Search Strategy:** I needed to add to the studies and research done in the area of e-books and their practical
application. This is another result of my efforts to use other databases get other perspectives on my topic and
broaden the base of my searching. I went back to LISTA, but included ERIC with it when I entered the search terms.
I was directed to Emerald Journals website to retrieve the full text.

**Database:** [ProQuest] Research Library

**Search Method:** Controlled vocabulary

**Search String:** SU=Electronic books AND SU=Libraries AND AB=(research OR study)


**Abstract:** Recreational reading among young people is reportedly on the decline in the United States. Some
researchers have suggested that supporting children's strategies for book selection is crucial to encouraging children
to engage with books, indicating that improving these strategies might increase the amount of reading they do. In
response, this study explores how elementary-school children select books for recreational reading using a digital
library. The work extends traditional models of relevance assessment with reader-response theory, employing the
concept of “aesthetic relevance”: the potential of a document to provide a suitable reading experience. Individuals
define aesthetic relevance in personal terms and apply it as they assess documents, much as they do in traditional
relevance assessment. This study identified a total of 46 factors organized along seven dimensions that influence
children's assessment of the aesthetic relevance of books during selection. The analysis yielded differences in the
prevalence of the aesthetic-relevance factors that children mention at various stages of book selection. In addition,
the children exhibited differences by age and subtle differences by gender in the frequency of mention of various
aesthetic-relevance factors. Recommendations drawn from the findings are offered to improve systems design and
literacy education in order to enhance children's access to books and to promote recreational reading.

**Annotation:** Following elementary school students to observe how they selected books for pleasure reading using
a digital library, the International Children’s Digital Library (ICDL), was compared and contrasted with the
traditional selection methods used by children in other studies. Selection strategies were similar for both traditional
print books and the digital copies. It is suggested that the design of digital libraries support book selection by
children with children: (1) having access to full text and images from the books; and (2) having time for more
analytical and critical review of their selections. The children in the study considered both level of difficulty and
language when locating accessible materials in ICDL. Further studies were suggested using similar factors and
dimensions with other collections and user populations in both the traditional and digital library setting while
comparing the process of book selection in traditional libraries to those within digital libraries.

**Authority:** Kara Reuter is the Digital Library Manager at the Worthington Libraries in Worthington, OH.
Worthington Libraries have received many awards for their service to their patrons including 2007 National Library
of the Year; Five-Star Library in 2009, 2010, and 2011 which is awarded by the Library Journal, and one of the Top
Ten American Libraries as rated by the HAPLR index in 2009 and 2010.
Scholarly/Refereed Status: According to EBSCOhost, the Journal of the American Society for Information Science and Technology is a peer-reviewed academic journal. It covers the subjects of information technology and library and information science. It is a forum for new research in the context of recorded knowledge, as well as information transfer and processes of communication.

Search Strategy: This was one of my initial searches so I selected SciSearch in Dialog because it deals with computer applications and I was just looking for general information about digital libraries. I also searched for methods of books selection which would apply criteria to either the librarian or the patron (particularly children) selecting books. I combined several searches but I needed to return to the terms of “book selection” to retrieve any information related to the topic.

Database: SciSearch®: A Cited Reference Science Database [Dialog]

Search Method: Keyword search using “digital libraries”

Search String: ? s electronic()books
? s book()selection
? s digital libraries


Abstract: Q methodology was used to determine attitudes and opinions about e-books among a group of faculty, graduate students, and undergraduates at Miami University of Ohio. Oral interviews formed the basis for a collection of opinion statements concerning e-books versus print. These statements were then ranked by a second group of research participants. Factor analysis of these rankings found four distinct factors that reveal clusters of opinions on e-books: Book Lovers, Technophiles, Pragmatists, and Printers. Two of the four factors take a more ideological approach in their understanding of e-books: Book Lovers have an emotional attachment to the printed book as an object, while Technophiles feel just as strongly about technology. In contrast, the other two factors are more utilitarian: Printers might find e-books more palatable if usability were improved, while Pragmatists are comfortable with both print and e-book formats. (Publisher’s abstract).

Annotation: Q methodology is the research method used for this study to reveal a person’s point of view about e-books and traditional books. As a result of the study, four distinct groups were revealed: Book Lovers, who love the printed word but would use an electronic source if needed; Technophiles, who love this new format but prefer the printed book when reading for leisure; Pragmatists who focus more on the academic possibilities and how to be more efficient; and Printers, who have difficulties reading off the screen and print out items in order to read them. Most said they would prefer the printed book for leisure reading. This is a study that could be used in another university scenario to determine if the results are consistent with all users/readers or if it unique to Miami University of Ohio. There are also other suggestions as to how the study could be used in future research.

Authority: Aaron K. Shrimplin is Head of Reference and Collection Services, Andy Revelle is Social Sciences Librarian, Susan Hurst is Business Librarian, and Kevin Messner is Life Sciences Librarian, all at Miami University Libraries. This article was presented by Aaron K. Shrimplin and Andy Revelle at the biennial conference of the Association of College and Research Libraries, March 13, 2009. The American Library Association and Ingenta supported this research through an ALAJ Ingenta Research Award Grant. Other research assistants, Jennifer Couch and John Williams, assisted in this research to help make this project successful.

Scholarly/Refereed Status: Ulrichsweb identifies College & Research Libraries as a refereed publication, as well as a scholarly research journal published by the Association of College and Research Libraries, a division of the American Library Association.
Search Strategy: I used Library Literature & Information Science Full Text for its extensive indexing of information science literature in full text. I began by searching the thesaurus for “e-books,” and “electronic books.” Although the research sample was limited to college level users, I selected this article since it dealt with the subjectivity of use e-books and e-readers by others.

Database: Library, Information Science & Technology Abstracts (LISTA)

Search Method: Keyword search

Search String: electronic books with peer-reviewed or refereed journals only


Abstract: This paper tracks the use of several hundred books at Oakland University that were made available both in print and electronically. This study attempts to determine if there are discernable differences in usage based on format. It also examines usage to determine if collections of books that were locally selected exhibit different usage than those purchased through a consortium. The author concludes that locally selected collections receive greater usage than consortially selected collections. Furthermore, the author finds that usage of a particular title in one format does not correlate to usage of that title in the other, but that there is a relationship between the formats when you compare aggregate circulations/accesses of books based within NetLibrary subject areas.

Annotation: One of the driving forces for this study was the problem of having an unusually high rate of lost and stolen books at Oakland University, particularly from the computer science collection. To help alleviate this problem, e-books were considered. One of the steps taken in acquiring e-books was to create a book selection or collection policy that would include the criteria for selecting e-books. In some cases, e-books got more usage than the printed format. This study will help other libraries determine if e-books would replace copies already in the collection, new editions of printed books that were being considered, or just expanding the library with ebook editions. Research has shown that if the print version is unavailable then patrons would use the electronic version anyway. The preference does vary by topic in that e-books were preferred in the areas of sciences, computers and technology, while the humanities had a preference for the print format.

Authority: Robert Slater is an Assistant Professor of Library Administration at University of Illinois at Urbana-Champaign and also serves at Web Technologies and Content Coordinator. His research interests are in the development of programs and interfaces to improve access to and use of diverse information resources, web usability and accessibility. He is a member of the American Library Association and has several published articles on the digital world and online content.

Scholarly/Refereed Status: The academic journal, *Library Collections, Acquisitions, & Technical Services*, is peer reviewed and published quarterly. According to UlrichsWeb, it provides a forum for the exchange of ideas and experiences among members about library acquisitions, collections management and bookselling communities worldwide, and emphasizes practical experience, as well as theoretical foundations of the profession.

Search Strategy: Since this was “footnote chasing,” I needed to find a full text database to find the title and selected Library Literature and Information Science because it contains full text articles in the field of library and information science. I entered the title and refined the search by including the year of publication, peer reviewed and full text. I could not find the title, so I changed the limiters to just peer-reviewed thinking that maybe the full text was not available in this database. I was then able to find the article through a Drexel Full Text link through Science Direct Journals.

Database: Library Literature and Information Science Full Text (H.W.Wilson)

Abstract:

Purpose – This paper aims to propose a definition for the concept “e-book” on the basis of an analysis of existing definitions. The e-book marketplace is growing rapidly and the potential impact of e-books on publishers, librarian and users is increasing in significance. Yet, there is agreement that despite a few widely accepted definitions there is no consensus on the definition of the term e-book, and, further that consensus on the definition would be beneficial for both researchers and practitioners.

Design/methodology/approach – This paper starts with a brief overview of the developments in e-books, covering technologies, marketplaces, and the attractions and challenges associated with e-books for users and libraries. It then reports on a content analysis of existing definitions of e-book. A collection of definitions was compiled through an exhaustive literature review. Content analysis was performed to identify the frequency of occurrence of key words and phrases across these definitions.

Findings – There is a consensus that definitions of e-book should include reference to: the digital or electronic nature of e-books, analogy to printed book, some indication of the content of e-books, and some allusion to e-book technologies. We propose a two-part definition that embraces these themes, but also reflects the in-use features of the e-book. Conclusions and recommendations make proposals for further discussion on the concept of e-book and, more widely, into the publication, acquisition and use of e-books.

Originality/value – In the rapidly developing e-book marketplace it is essential to have agreement on the definition of e-book, and furthermore, such a definition needs to reflect both the persistent characteristics of e-books, and their dynamic and developing nature.

Annotation: With the development of the digital book, or ebook, the definition of such is still elusive to many in the publishing and library worlds. The use and subsequent definition of electronic books is still confusing especially within the context of academic publishing. While trying to associate the ebook to the traditional printed book, there still lurks the focus of defining the format through the technologies that use it. There is discussion about how much more the user will gain by using the ebook, but the standardization of technologies is still an issue to make access to this format more straightforward and practical. The authors propose a two part definition: one part for the digital object with text or other content; and another part for the technologies.

Authority: Jennifer Rowley is a professor of Information and Communications at the Manchester Metropolitan University in England. She is currently the Masters Dissertation Coordinator and works in research leadership. She is a professional member of the British Computer Society and the Chartered Institute of Library and Information Professionals. She has supervised PhD students with a wide range of topics, including e-books, knowledge management and knowledge sharing. Magdalini Vasileiou has been recently awarded a Ph.D from the Department of Information and Communications at Manchester Metropolitan University researching e-books and collection development. She holds an MSc in Information Management from Manchester Metropolitan University and a bachelor degree in Librarianship from Technological Institution of Thessaloniki. She has worked in academic libraries and other information services both in Greece and the UK and is currently working on a feasibility study for a public library project in Greece.

Scholarly/Refereed Status: Library Hi Tech is an academic journal is published quarterly and is peer reviewed. It features articles and issues which are focused on technology within the library and affect the automation and management of libraries and information centers for professional librarians and information specialists. According to Ulrich’s, article formats include case studies, general articles, research papers, technical papers, and conceptual papers which focus on specific topics; recent topics include technology and digital preservation, conference reports, next generation OPACs, and best young professionals.
Search Strategy: While reading the article by Carreiro, there was a reference used in her paper that would probably work in this review of literature. I decided to access a different full text database to retrieve a copy to add to the depth of my research.

Database: [ProQuest] Research Library

Search Method: Footnote chasing

Search String: TI= Progressing the definition of "e-book"

Conclusions and Personal Statement

This review of the literature adds to my commitment of moving from the field of teacher/school librarian to digital libraries. It is a growing field and seeing what has occurred in the field in the past fifteen years or so is very exciting. I feel that it is important that device reading software become standardized to one or two versions, much like the PC industry has become standardized to a few platforms. That way more digitized information can be accessible to more people no matter what electronic device they are using. Sharing information as well as books and/or documents between devices would be one more step in expanding knowledge for everyone. Once the standard has been established and implemented, publishing companies and authors/writers would reach more people and costs of doing business would be reduced.

This exercise in creating this bibliography has broadened my knowledge about information structure and increased my ability to research more effectively. I have learned that there are many ways to conduct searches with some being more productive than others depending on the database you are using and what you need to retrieve. In the past, when I searched, I expected full text returns. I discovered that although some databases do provide full text articles, but sorting through them is more efficiently done in abstract form. Writing the annotation helped me to solidify the information about the article in my understanding, and writing the literature review helped me to apply it to my field of study. I found many journal
articles about these topics, but realized I could not include them in this literature review, but do not regret taking the time to read them since some authors were familiar to me and their articles included studies and other research which added to my knowledge base.

I have always wanted to be a school librarian and whether I move from education librarianship to digital libraries or not, does not matter. The understanding that I have gained about serving users with digitized information and helping them learn how to access these materials is the next step in my career even though some would consider that my career path should be ending. As librarians, it is important that we guide our users to the tools that they need to get the most out of their reading whether it is for information or pleasure. There is also a need to understand that we all are in a transition between the total paper book and the total electronic book collection. The transition will eventually come. But in the interim, we still need to help people learn how to learn because “Tomorrow’s illiterate will not be the man who can’t read; he will be the man who has not learned how to learn.”