

Library Mobile Initiatives

Libraries are mastering the mobile Web to bring patrons a new set of services—services that their users are coming to expect from communities and content providers. They are leveraging the technology that their patrons are using, such as cell phones and iPods, to deliver robust new services without making users leave their comfort zones. And these portable offerings are serving to integrate library services with patrons' daily lives.

Mobile Library Web Sites and MOPACs (Mobile OPACs)

A growing number of libraries are creating mobile versions of their Web sites for their patrons to access on the go. They are offering information about library services and collections and providing access to library catalog search, portable exhibit information, subject guides, e-journals, and library hours, all formatted for the small screen.

Ball State University Libraries has established a mobile Web presence that offers library patrons a catalog search, journal search, videos about the libraries, information about library collections and services such as ILL and course reserves, and quick links to mobile reference Web sites pertaining to weather, news, search, sports, and finance (see figure 23). The University of Richmond Libraries' mobile site enables visitors to search through the Voyager catalog, access live laptop and PC availability information, and submit e-mail, SMS, or IM reference questions. Ohio library-goers can search the OPLIN Mobile Web site to find the closest public library of the state's 250 branch locations. On the University of Virginia Libraries' mobile Web site, library news and events are

displayed as clickable links along with exhibitions information, directions, library hours, and a text-only version of the desktop Web site. The Medical Library at Boston University has made all of its subject guides viewable in mobile format and created search functionality for e-book titles, e-journal collections, bibliographic databases, and the library Web site as a whole. NYU's The Arch mobile portal offers a search of the university's electronic resources collection by title, subject, or format as well as information about the library.

Innovative Interfaces has designed a portable version of its OPAC product called the AirPAC, created for patron use on mobile devices. Libraries using the Millennium integrated library system can opt to use this additional OPAC to provide their users with mobile catalog search capabilities. Through the AirPAC, patrons can retrieve information about checked-out items, due dates, fines,

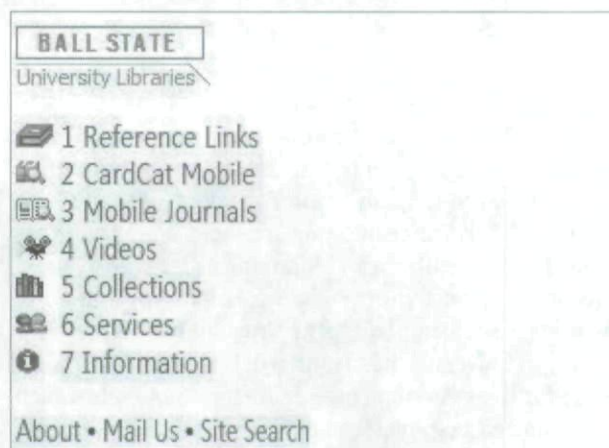


Figure 23
Ball State University Libraries

and other personal information and can search the library catalog, place and cancel holds, and renew items from their cell phones. The AirPAC is being used by Wayne State University, the Nashville Public Library, and the Hennepin County Library, among others.

Mobile Library Web Sites

Ball State University Libraries mobile site
www.bsua.edu/libraries/mobile

UR LibMobile (University of Richmond Libraries)
<http://oncampus.richmond.edu/academics/library/mobile/index.htm>

OPLIN Mobile
www.oplin.org/mobile

U.Va. Mobile / Library (University of Virginia Libraries)
<http://mobile.virginia.edu/library.php>

Boston University Medical Center Mobile Library
<http://med-libwww.bu.edu/mobile>

Wayne State University AirPAC
<http://elibrary.wayne.edu:6060/airpac>

Nashville Public Library
www.library.nashville.org

Hennepin County Library AirPAC
<http://mplwebcat.mplib.org/airpac>

Mobile Collections

Libraries are offering patrons digital media collections that they can take to go, enabling them to benefit from library services remotely.

The Thomas Ford Memorial Library (see figure 24) and the St. Joseph County Public Library are both offering audiobooks ranging from *The Devil Wears Prada* to *Animal Farm* preloaded on lendable iPod Nanos for patrons to take with them. Librarians will also load audio titles onto patrons' own iPod devices for the duration of the three-week loan period. The Crouch Fine Arts Library at Baylor University has transferred all listening assignments for the semester's music courses onto iPods, which are organized by professor and course number. Students can check out these preloaded iPods for up to 12 hours. The University of Virginia Library has created a collec-

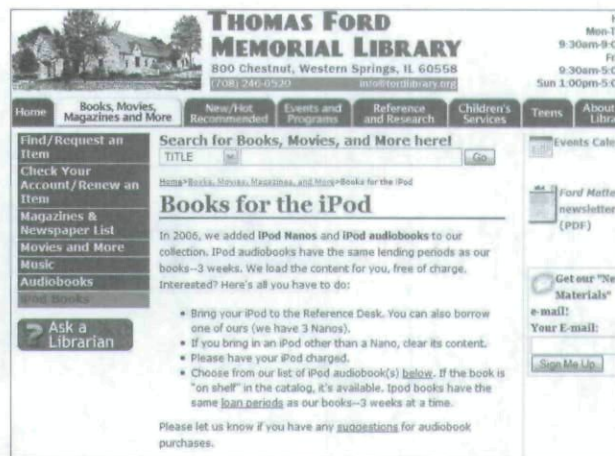


Figure 24
 Thomas Ford Memorial Library

tion of over 2,100 e-books from its Etext Center, which includes American history titles, American and British fiction, major authors, and Shakespearean works. It has had more than 8.5 million downloads from its Web site over 21 months.¹

The OverDrive digital media service has partnered with over 7,500 libraries to offer audiobook collections, e-books, video, and music files to library patrons. Patrons who belong to a participating library can transfer a wide range of media items to their mobile devices, such as documentaries and feature films, narrated audiobooks, and jazz and opera CDs, which can be played on mobile devices using the OverDrive Media Console. MobiPocket and Adobe Reader e-book titles may also be borrowed and uploaded to portable devices. The New York Public Library is utilizing the OverDrive service for its eNYPL service, which includes access to over 2,500 MobiPocket-compatible e-books. The C/W MARS library network in Massachusetts offers the OverDrive service to its 150-plus member libraries, including Berkshire Community College and the State Library of Massachusetts. And the University of Alaska Fairbanks provides its students, faculty, and staff with foreign language study audiobooks as well as historical and political resources through the ListenAlaska Web portal, stocked with OverDrive titles.

Mobile Collection Links

Thomas Ford Memorial Library
www.fordlibrary.org

St. Joseph County Public Library
<http://sjcpl.lib.in.us>

Crouch Fine Arts Library (Baylor University)
www.baylor.edu/lib/finearts

Mobile Collection Links (cont.)

University of Virginia Library Etext Center
<http://etext.lib.virginia.edu/ebooks>

OverDrive
www.overdrive.com

eNYPL
<http://ebooks.nypl.org>

C/W MARS Digital Catalog
<http://cwmars.lib.overdrive.com>

ListenAlaska Digital Catalog (University of Alaska Fairbanks)
<http://listenalaska.lib.overdrive.com>

Mobile Library Instruction

Library users who don't have the time or inclination to attend an on-site workshop can still get the most out of the library resources by accessing classes and tutorials on their mobile devices. Libraries have begun distributing their knowledge and expertise about library systems and materials via MP3 and video files that patrons can take with them.

The Washington State University Libraries offer patrons how-to help with library tools and resources through brief MP3 audio recordings that can be uploaded to iPods and other mobile devices. The WSU Libraries present a three-minute guide to the map collection, two-minute tutorials on how to select search terms and use Boolean operators, and instructional audiocasts on using their online databases to find journal articles. The Sheridan Libraries at Johns Hopkins University offer lengthy podcasts instructing listeners in how to create maps, conduct citation searches, and ask a librarian. The Alden Library at Ohio University has created a series of short audio files describing making intercampus requests, reserving group study rooms, obtaining reference assistance, and attending library workshops.

iTunes University has hundreds of educational podcasts, many from college and university libraries that can be uploaded to patrons' MP3 and portable media players and taken to go. The Texas A&M Libraries have their own channel on iTunes, featuring downloadable videocasts covering topics such as finding books, articles, databases, and e-journals; several types of library catalog searches; and a virtual tour of the library (see figure 25). The Faculty Workshop Series at the Arizona State University Libraries is a video podcast series that can be found by accessing the ASU Library Channel within iTunes. The

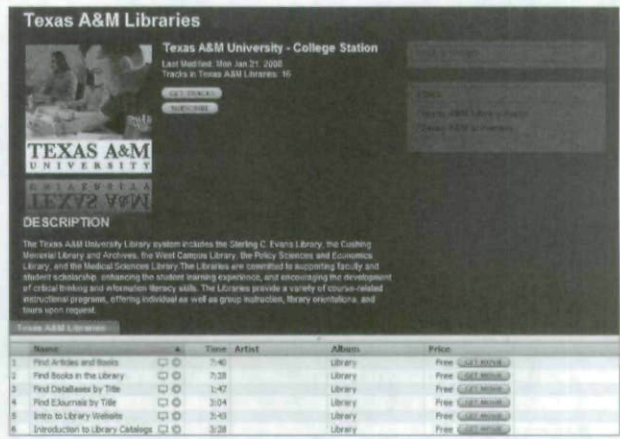


Figure 25
Texas A&M University Library on iTunes

three- to five-minute videos concerning finding articles, getting started doing library research, and finding books can be viewed on portable devices such as a video iPod at the learner's convenience.

Mobile Library Instruction Links

Podcasts from the Washington State University Libraries
www.wsulibs.wsu.edu/science/podcast.htm

Sheridan Libraries Podcasts (Johns Hopkins University)
www.library.jhu.edu/podcasts

Behind the Desk: Podcasts from Alden Library (Ohio University Libraries)
www.library.ohiou.edu/podcasts

iTunes
www.apple.com/itunes

Mobile Databases

It's not only libraries that have seen the writing on the wall with regard to the mobile Web; academic software and database providers have started taking portability to heart.

The scholarly citation management application Endnote has rolled out mobile functionality for Pocket PC owners with its X1.0.1 release. Factiva's news database has a search interface for mobile Web users, as does the Westlaw legal research database. Library patrons can access detailed company information while on the road through Hoover's Mobile, and the National Library



The world's largest medical library

PubMed for Handhelds

MEDLINE/PubMed

Search [MEDLINE/PubMed](#)

Read [Journal Abstracts](#)

[PICO](#) search

Patient, Intervention, Comparison, Outcome

[askMEDLINE](#)

free-text, natural language search

Figure 26
PubMed

of Medicine makes it possible for medical students to research remotely through PubMed for handhelds (see figure 26).

Mobile Database Links

Endnote

www.endnote.com

Factiva Mobile

<http://mobile.beta.factiva.com>

Westlaw Mobile

<http://wl-w.com>

Hoover's Mobile

<http://mobile.hoovers.com>

PubMed for Handhelds

<http://pubmedhh.nlm.nih.gov>

Mobile Audio Tours

Libraries are making guided tours more convenient for patrons with busy schedules by offering self-service audio tours for handheld devices. Rather than asking patrons to schedule an appointment in advance or learn to utilize a new technology, these new audio tours make the most of patrons' MP3 players and cell phones to impart information.

Duke University Libraries provides a 10-part audio walking tour of its Bostock Library, available for download as MP3 files. The Simmons College Library offers students, faculty, and staff the ability to check out an iPod

preloaded with a guided audio tour of its Beatley Library and Information Commons. The University of Southern California offers an eight-part video tour of its Doheny Memorial Library through its iTunes University Campus Life channel, giving remote mobile users a glimpse of the structure. Students and staff at Arizona State University can download a walking tour of the Hayden Library through the Library Channel on iTunes U. The C. V. Starr East Asian Library at Columbia University provides enhanced audio podcasts of its facilities in English, Chinese, Korean, Japanese, and Tibetan.

Another way libraries are offering mobile tours of their collections, services, and buildings is through the Guide by Cell service. This unique service enables library visitors to dial in to a toll-free number on their cell phones to access a guided tour of the library. Patrons are able to specify particular items they are interested in learning about, approach the excursion at their own pace, and leave comments and feedback for the library. This interactive service is being used by the Dartmouth College Baker Berry Library, the Folger Shakespeare Library and Museum, and the Library of Congress. A similar service is Museum 411.

Mobile Audio Tour Links

Bostock Library Walking Audio Tour (Duke University Libraries)

<http://library.duke.edu/about/perkinsproject/audio-tour.html>

Beatley Library & Information Commons Tour Portal (Simmons College)

<http://my.simmons.edu/library/tour>

iTunes

www.apple.com/itunes

iPod Tours of the C. V. Starr East Asian Library

www.columbia.edu/cu/lweb/indiv/eastasian/tours.html

Guide by Cell

www.guidebycell.com

Museum 411

<http://museum411.com>

Library SMS Notifications

Text message alerts offer busy mobile owners quick news announcements and reminders about important events or provide requested information. Libraries are beginning to offer these speedy advisories as an added service to patrons.

The Undergraduate Library at the University of Illinois at Urbana-Champaign is offering students the opportunity to be notified by text messaging when librarian research specialists are offering office hours and are available to provide in-depth reference assistance. Australia's Monash University Library offers SMS notifications to inform students when their items are due back, remind them about overdue items, and advise them of fines incurred. Library patrons at the Simmons College Library can send themselves text messages from the library catalog with item records attached (see figure 27). The Orange County Library System in Orlando, Florida, provides an opt-in SMS text messaging service that sends reminders to patrons when their items are coming due and when classes that they have registered for are nearing. And the Library at the BI Norwegian School of Management in Oslo, Norway, is offering SMS alerts to notify students when items they have requested become available.

These types of individual text notification services provided by libraries today are similar to the campus-wide alert systems provided by companies such as Rave Wireless and e2Campus, which keep entire university communities updated on school closings, event changes or cancellations, emergencies, and sports team scores. In use by hundreds of colleges and universities including Penn State, Texas A&M, and the University of South Florida, these mass notification services via SMS are proving increasingly popular and useful. Colorado State experienced a 90% student enrollment rate in their program with Rave Wireless within the first six months of the rollout.²

Library SMS Notification Links

UGL Text Alerts (UIUC Library)
www.library.uiuc.edu/ugl/about/textalerts.html

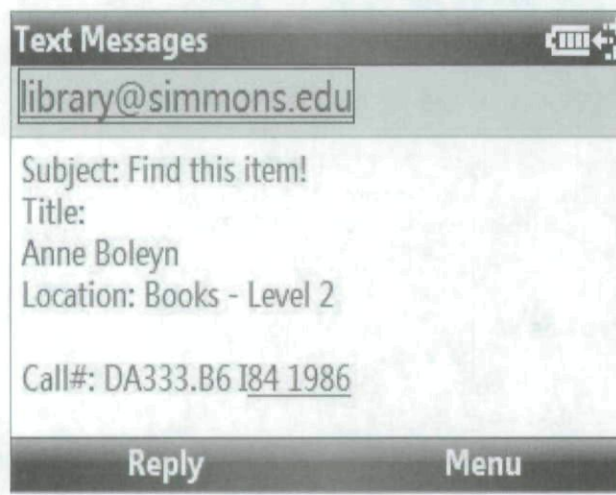


Figure 27
 Simmons

Library SMS Notification Links (cont.)

my.monash.edu (Monash University Library)
<https://my.monash.edu.au/library/services/sms/>

Simmons Library Catalog
<http://library.simmons.edu/search>

Orange County Library System
www.ocls.info

Rave Wireless
<http://ravewireless.com>

e2Campus
www.e2campus.com

SMS Reference

Reference services at libraries today are becoming increasingly virtual as more and more researchers are working remotely. Technologies such as instant messaging, e-mail, and now SMS text messaging are making it easy for libraries to maintain relevance as information hubs by offering convenient services to busy users. New ask-a-librarian services are offering mobile patrons the ability to text in their research questions from afar.

The Orange County Library System has established an SMS reference service in which library patrons can submit their reference questions by texting them to librarians or by utilizing one of the system's special keywords in order to receive instant results. Keyword queries involve preceding inquiries with terms such as *zip* to find the closest branch location by zip code, *address* to retrieve a branch's address, and *gamer* to get information about the next gaming night. The American University Library, Kansas State University Libraries, and Wake Forest University's Z. Smith Reynolds Library are all offering text-a-librarian services by utilizing a workaround with the AOL instant messaging system. This AIM hack involves instructing users to text their message to the number 265010 and precede their question with the library's AIM username and a colon, i.e., askaulibrary: question. The message is forwarded to the library via SMS messaging.

Several libraries, including the Southeastern Louisiana University Sims Memorial Library, are using the Reference by SMS service from the Australian vendor Altarama Information Systems. According to SELU librarians, the service is easy to set up and costs in the neighborhood of \$1,100, which includes a phone number and a bundle of 1,000 text messages for the year.

SMS Reference Links

*Ask-a-Librarian: Instant Messaging
(American University Library)*
www.library.american.edu/ask/im.html

*Ask a Librarian (Kansas State University
Libraries)*
www.lib.k-state.edu/reference/vref

*Text with a Librarian (Wake Forest
University Library)*
<http://zsr.wfu.edu/services/information/text.html>

*Text a Librarian (Southeastern Louisiana
University Library)*
www.selu.edu/library/askref/text/index.html

Altarama Reference by SMS
www.altarama.com.au/refxsms.htm

Mobile Library Circulation

Not all new mobile tools for libraries involve direct patron interaction. Some can be used behind the scenes to offer improved library services.

The SirsiDynix company has developed a handheld circulation tool called PocketCirc that enables librarians to access the Unicorn Library Management System on a PDA. This wireless solution enables staff to assist patrons in the stacks, check out materials while off site (for example, at community or campus events), and update inventory items while walking around the library.

PocketCirc
<http://tinyurl.com/6ltsc4> (Select "PDA Circulation Tools" tab.)

Imagine . . .

Libraries are already offering amazing services through the use of the mobile Web. Imagine where we'll be in a year or two as mobile Internet adoption continues to increase and portable devices steadily improve.

What if students entering the library stacks could scan a QR barcode (such as the ones in the Appendix) to access a guide to navigating each floor's layout? As 2D barcode readers become more mainstream in the United States, as they are in Japan, these graphic images will become more recognizable.

What if library patrons could check out their own books and media items? This might become possible with mass adoption of 2D barcode readers similar to the ones available today in conjunction with virtual wallet capabilities, which are currently being adopted in Japan.

What if mobile phone owners could turn on their phones and click on a library icon that offered them shortcuts to desired library content such as e-books and audiobooks without ever having to open a Web browser? This is already possible today with the proper programming.

What if a student could click on a cell phone icon that would initiate a video conference with a research librarian? With powerful services such as Skype Mobile, this may soon be a reality.

Library Mobile Resources and Reports

- "100 Ways to Use Your iPod to Learn and Study Better." OEDb, Feb. 12, 2008, <http://oedb.org/library/beginning-online-learning/100-ways-to-use-your-ipod-to-learn-and-study-better> (accessed Feb. 14, 2008).
- Arriaga, Arlinda. "Denton Public Libraries Offer Text Message Notifications." *North Texas Daily*, Jan. 29, 2008, <http://media.www.ntdaily.com/media/storage/paper877/news/2008/01/29/Life/Denton.Public.Libraries.Offer.Text.Message.Notifications-3173543.shtml> (accessed Feb. 20, 2008).
- Megan. "Mobile Phone Audio Tours." *The Handheld Librarian*, Aug. 7, 2006, <http://handheldlib.blogspot.com/2006/08/mobile-phone-audio-tours.html> (accessed Feb. 20, 2008).
- Perton, Marc. "Public Library Lends out Book-Filled iPod Shuffles." *Engadget*, Febr. 23, 2005, www.engadget.com/2005/02/23/public-library-lends-out-book-filled-ipod-shuffles (accessed Feb. 21, 2008).
- "Podcasting." *Library Success Wiki*, www.libsuccess.org/index.php?title=Podcasting (accessed Feb. 20, 2008).
- Stephens, Michael. "Can U TXT the LBRY?" *ALA TechSource*, June 29, 2007, www.techsource.ala.org/blog/2007/06/can-u-txt-the-lbry.html (accessed Feb. 20, 2008).

Notes

1. EText Center: Collections, <http://etext.lib.virginia.edu/ebooks> (accessed March 23, 2008).
2. David Nagel, "Colorado State Achieves 90% Student Participation in Emergency Notification System," *Campus Technology*, March 6, 2008, <http://campustechnology.com/articles/59521> (accessed March 7, 2008).

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