Chapter 4 of Library Technology Reports (vol. 50, no. 8), Selecting and Evaluating the Best Mobile Apps for Library Services, includes thoughts about the next steps for mobile technology and resources for further exploration, including a list of core mobile apps, blogs, articles, books, websites, and online courses.

What's Next for Mobile Technologies?

Once you immerse yourself in the world of mobile apps for work, productivity, writing, creating, and professional development, you'll get a real sense of their potential for education and content creation. You'll see how natural user interfaces make computing less about the device itself and more about what you can do with it.

The world of mobile technology is quickly moving beyond smartphones and tablets with the use of wearable technologies (such as fitness tracking wristbands or Google Glass) and technologies that turn any physical object into a touchscreen. There is also quite a bit of progress with technologies known as "The Internet of Things." That's a term used to describe a world where humans, animals, and objects have sensors with unique identifiers and have the ability to coordinate their activities. As with any technology, there are both dystopian and utopian futures described by many, especially about wearable technologies like Google Glass. As always, it's up to us as informed citizens to build and use them for good. Experience and innovation goes hand in hand.

What are some good ways to keep up with the ever changing world of mobile technologies? We can test new technologies, as did the Marcellus (NY) Free Library with Google Glass. We can attend conferences outside of the usual sphere of library science conferences, such as the Computers, Freedom, and Privacy conference, and follow the work of organizations that defend civil liberties and privacy in the digital world, such as EFF (Electronic Frontier Foundation) and EPIC (Electronic Privacy Information Center). I hope you will encourage experimentation with these new mobile technologies, followed by analysis and reflection.

Core Mobile Apps: A List

The following is a list of important apps to know about. Be aware that sometimes these apps get purchased by other companies or change the location of their web pages, so you may have to search for "[app name] iOS" or "[app name] android." If you have a new mobile device, start with these.

- note taking: Evernote
- cloud storage: Dropbox or Box
- saving webpages for offline reading: Instapaper or Pocket
- social media: Twitter, Instagram, Facebook, Pinterest, Foursquare
- travel apps: Google Maps, Citymapper
- weather: AccuWeather, weather.com
- music: Spotify, Rdio
- video: YouTube, Vimeo
- photography: Snapseed, Photoshop Express
- books: Google Books, iBooks
- games: Candy Crush, Angry Birds

Summary and Further Resources

Chapter 4 of Library Technology Reports (vol. 50, no. 8), Selecting and Evaluating the Best Mobile Apps for Library Services, includes thoughts about the next steps for mobile technology and resources for further exploration, including a list of core mobile apps, blogs, articles, books, websites, and online courses.
• calendar: Fantastical (iOS only)\(^{12}\)
• secure password generation and storage: 1Password or LastPass\(^{13}\)
• e-reading: iBooks (iOS only) and Kindle\(^{14}\)
• phone calls: Skype and Google Voice\(^{15}\)
• magazines: Zinio and Next Issue\(^{16}\)
• custom news feeds: Feedly and Flipboard\(^{17}\)
• streaming radio and podcasts: TuneIn Radio and Stitcher\(^{18}\)
• scanning documents: JotNot Pro (iOS only) or Genius Scan\(^{19}\)

There are many other apps to use for news, reference, productivity, writing, multimedia, speech recognition, interactive e-books, art, drawing, photo editing, music listening, music creation, and other educational topics.

So this list is only a starting point. If I had just received my first mobile device, I would install these apps first.

If you want to go beyond these, see my book, *Best Apps for Librarians: Using the Best Mobile Technology to Educate, Create, and Engage.*\(^{20}\) It contains descriptions and use cases for over 100 apps that are important to know about for educational and professional use by librarians.

The book includes app recommendations for the following topics:

• reading
• productivity
• research and reference
• taking notes and writing
• multimedia
• social media
• communication
• content creation and curation
• showcasing special collections
• going beyond the library catalog
• professional development

For a more detailed table of contents, see the book’s website: http://apps4librarians.com/thebook.

**Blogs and Websites**

The following apps, blogs, and websites are a great way to keep up with new apps of quality.

**Android Apps Review**, www.androidappreview.com. Full reviews of Android apps in categories such as books, business, education, medical, music, and news.

**Android Tapp**, www.androidtapp.com. Reviews of Android apps in categories such as finance, health and fitness, multimedia, music, news and weather, photography, reference, travel, and more.

**AppAdvice**, http://appadvice.com. Contains iPhone/iPad news, reviews, lists, and guides to the best apps by function, such as flight trackers, apps to replace your camera, personal databases, and more.

**Appitic**, www.appitic.com. A directory of apps for education by Apple Distinguished Educators (ADEs). The focus is on the K–12 age group, and there is also much here for adult learners. It’s organized in interesting ways, including by subject, by Bloom’s Taxonomy, and by multiple intelligences, and it includes apps for special needs, apps for the “flipped classroom,” and apps for teachers.


**Appotography**, http://appotography.com. The world of photography apps is huge. Since photography can be used in so many ways, especially in education, it’s good to keep up with the best photography apps. Covers iPhone, iPad, Mac, Android, web, and more.

**Boing Boing’s Apps for Kids**, http://boingboing.net/tag/appsforkids. Apps for Kids is Boing Boing’s podcast about smartphone apps for kids and parents by Mark Frauenfelder and his ten-year-old daughter.

**MacRumors Buyer’s Guide**, http://buyersguide.macrumors.com. If you are wondering about the best time to buy or upgrade your iOS devices, visit this buyer’s guide. For each device (iPhone, iPad, iPod Mini, iPod Touch, iPod Shuffle, iPod Nano, iPod Classic), you can find out when it was last updated so that you can avoid buying a new device right before a new version is announced. For each device the guide recommends “Buy Now,” “Neutral,” “Caution,” or “Don’t Buy.” It also provides details such as photos of the device, last release date, number of days since update, and links to rumor sites about upcoming releases.


**Books**

**Good for Background on Apple Devices**

Carlson, Jeff. *The iPad Air and iPad Mini Pocket Guide.* San Francisco, Peachpit Press, 2014.\(^{21}\) Good book for beginners for an overview of the basic functions of your
iPod. The author has written many helpful technology books over the years.


### Mobile Technology for Those with Special Needs


Brizin, Shelly. *iOS Access for All: Your Comprehensive Guide to Accessibility for iPad, iPhone, and iPod Touch*. Self-published, 2014. This book is a comprehensive look at the accessibility features of iOS devices. It’s available in EPUB format optimized for Apple’s iBooks reader and tagged to provide maximum accessibility for screen readers. It includes detailed descriptions of how to use all the built-in accessibility features, information on how they work in Apple’s apps, and a chapter on the best third-party apps that are accessible.

Smith, Kei. *Digital Outcasts: Moving Technology Forward without Leaving People Behind*. Waltham, MA: Morgan Kaufmann, 2013. Digital outcast is a term for a person who is left behind the innovation curve of new technology for any of multiple reasons. This is an excellent book for gaining a nuanced approach to how we define and view people with “disabilities” and makes the point that we are all disabled (or will be) in one way or another at different points in our lives. It includes a detailed overview of how people with disabilities use technology, and it shows how creating accessible interfaces benefits everyone.

### Mobile Ecosystems

Harvell, Ben. *iConnected: Use AirPlay, iCloud, Apps, and More to Bring Your Apple Devices Together*. Indianapolis, IN: Wiley, 2013. This book contains useful instructions for using your devices together, such as displaying your iPhone on an HDTV and effectively using iCloud for synchronization.

Levin, Michal. *Designing Multi-Device Experiences: An Ecosystem Approach to Creating User Experiences across Devices*. Sebastopol, CA: O’Reilly, 2014. This book is written for product managers, designers, and entrepreneurs, but it is a useful read for anyone interested in excellent user experience. In our multi-device world, people often switch between smartphones, tablets, computers, wearables, and televisions to accomplish a task. The book combines theory and practice, offering many real-world examples in a highly readable way. These principles can be applied to designing better experiences for library users.

### Libraries and Mobile Technology


### Finding the Best Apps

Hennig, Nicole. *Apps for Librarians: Using the Best Mobile Technology to Educate, Create, and Engage*. Westport, CT: Libraries Unlimited, September 2014. A guide to the best apps for librarians to recommend to their communities and for use in their own professional work. This book contains descriptions and use cases for over 100 apps. See the full table of contents: http://apps4librarians.com/thethebook.


### Articles and Reports

The following articles are recommended for learning more about the topics in this report.

### Statistics on Mobile Apps Use

Selecting and Evaluating the Best Mobile Apps for Library Services

Nicole Hennig


Purcell, Kristen, Alan Heaps, Judy Buchanan, and Linda Friedrich. “How Teachers Are Using Technology at Home and in Their Classrooms.” Pew Research Internet Project, February 28, 2013. www.pewinternet.org/2013/02/28/how-teachers-are-using-technology-at-home-and-in-their-classrooms. Report includes information about the use of mobile devices in the classroom, including the fact that 73 percent of teachers surveyed said that they or their students use mobile phones in the classroom to complete assignments. Discusses benefits and challenges of these technologies.


Special Needs and Assistive Technologies


Aquino, Steven. “Re-Enabled: iOS’s Impact on Those with Impairments Isn’t Just a Marketing Slide; It’s Profound.” The Magazine, no. 9 (January 31, 2013). http://themagazine.com/9/re-enabled. Article by an author, who is legally blind, and who works with preschool children with special needs. He discusses how and why the iPad is extremely empowering for students and staff and how it keeps the kids engaged far more effectively than conventional tools.

Cameron, Jenna. “Winnipeg Student Uses iPad to Speak First Words.” CBC News September 23, 2013. www.cbc.ca/m/touch/canada/manitoba/story/1.1864750. Story of a seven-year-old girl with a congenital disorder that prevents speaking, showing how she’s communicating via her iPad using apps such as TouchChat.

Hendren, Sara. “All Technology Is Assistive: Six Design Rules on ‘Disability.’” Medium, October 16, 2014. http://medium.com/backchannel/all-technology-is-assistive-ae9f7183c8cd. Article makes the case that it’s wrong to divide the world into disabled and not disabled and that we are all disabled in different ways and times in our lives. Encourages designers and everyone to pay more attention to disability matters, with six principles for designers.


Kornowski, Liat. “How the Blind Are Reinventing the iPhone.” The Atlantic, May 2, 2012. www.theatlantic.com/technology/archive/2012/05/how-the-blind-are-reinventing-the-iphone/256589. Inspiring article about how the iPhone has turned out to be as revolutionary
as Braille for blind users. Specific stories with details of how and why the iPhone works so well.

New Roles for Libraries: Going Beyond Collections of Books


Digital Book World. “Four Local Libraries Honored for Offering Cutting-Edge Services.” Digital Book World. February 4, 2014. www.digitalbookworld.com/2014/four-libraries-offering-cutting-edge-digital-services. Story of four libraries honored by ALA for offering cutting-edge technology services, including services for easy video creation by faculty and students and using Instagram’s API to capture photos tagged with the library’s hashtag and displaying them online and in the library.


The Future of User Interfaces: Mobile and Beyond


Brownlee, John. “How Flat Design is Preparing iOS for the Gadgets of Tomorrow.” Fast Company, October 24, 2013. www.fastcodesign.com/3020586/how-flat-design-is-preparing-ios-for-the-gadgets-of-tomorrow. A look at how Apple’s flat design that began with iOS 7 is going to work well with the design of car systems and watches.
since flat design icons can be resized by just expanding the colors at their edges and filling the remaining space. This will work well on curved displays, such as watches that wrap around your wrist. Flat design will also make it easier to move to 3-D displays.


della Cava, Marco. “Beyond a Gadget: Google Glass Is a Boon to the Disabled.” USA Today, October 23, 2013. www.usatoday.com/story/tech/2013/10/22/google-glass-aids-disabled/3006827. Interesting story of how Google Glass is used by people with various disabilities and how it reduces the time between intention and action, something useful to all users. Being hands-free and voice-activated, it’s a very helpful device for many situations.

Holland, Beth. “5 Myths about Writing with Mobile Devices.” Edudemic, April 26, 2013. www.edudemic.com/5-myths-about-writing-with-mobile-devices. Excellent article about how writing is not just keyboading and word processing, but is much more, including the process of creating blogs, e-books, and curated digital magazines, all of which are done easily with apps and mobile devices.


Vanhemert, Kyle. “Why Her will dominate UI design even more than Minority Report.” Wired, January 13, 2014. www.wired.com/design/2014/01/will-influential-ui-design-minority-report. Article making the case that the way technology is portrayed in the movie Her—discrete, subtle, and human-centered—is where technology is headed and that this is a new era of personalized, intelligent apps.

Online Courses

Apps for Librarians and Educators
http://apps4librarians.com

This course covers the best apps in several categories, such as reading, productivity, reference, and multimedia. Each week’s lesson includes screencast demos of apps, provocative readings, discussion questions, and an optional live chat. You’ll learn how to write app reviews, and you’ll share them with your colleagues in a private class blog.

It’s available as a five-week course via ALA e-learning or in a self-study version that you can purchase anytime and complete at your own pace.34 Some testimonials:

Before taking Apps4Librarians, I didn’t realize there were so many apps that could be useful in educational settings. I look forward to sharing information about some of the apps I learned about in this course with my colleagues and possibly lead some workshops on specific apps.—Ellen Lutz, Research Services Librarian in the Sciences, University of Texas at San Antonio

Excellent course. This class exceeded my expectations. It provided a good mix of the practical and theoretical components of iOS and Android applications. Nicole is enthusiastic, encouraging, engaging and very knowledgeable.—Mary Jane Canavan, Head of Library Systems, University of Massachusetts, Amherst

The Book as iPad App
http://apps4librarians.com/bookapps

This course covers multimedia, multi-touch e-books—the kind that are published as individual apps. We look at fiction, nonfiction, reference, children’s books, and graphic novels. These book apps include many features that are useful for education, such as embedded videos, slideshows, quizzes, and more.
Each week’s lesson includes screencast demos of apps, provocative readings, discussion questions, and an optional live chat. You’ll learn how to write app reviews, and you’ll participate in brainstorming sessions about how these apps can be used in library programs and services. By the end, you’ll be familiar with what makes the best interactive reading experience and you’ll be inspired with ideas for library programs using these apps.

This course is useful for anyone who cares about the future of the book and the blurring boundaries between book and app.

Available via Simmons GSLIS continuing education online or in a self-study version that you can purchase anytime and complete at your own pace.

A testimonial:

This course gets five stars not only for the information it contains, but also for the level of empowerment it provides. I signed up not knowing a thing about book apps, and in a month’s time I am using them at work and collaborating with a library colleague to create a book app of our own for use in story times. The topic is timely, relevant and fun! I couldn’t ask for more.—Susan Hansen, Branch Manager, West Hartford Public Library, Hartford, CT

iPads, Tablets, and Gadgets in the Library: Planning, Budgeting, and Implementation

This online course, created by three librarians from Virginia Tech and published by ALA, covers practical topics such as doing a needs assessment of your community, getting funding, writing policies, training staff, case studies, and how to stay current. See their blog for their current offerings: http://tabletsinlibrarie.tumblr.com.

More Courses
See http://nicolehennig.com/courses for my upcoming courses.

Keeping Current
To keep up with new courses, along with news about mobile apps for education, join the community of librarians who read Mobile Apps News: http://nicolehennig.com/mobile-apps-news, my twice-monthly e-mail newsletter.

Notes
3. For interesting reading about how the Internet of Things may play out, see Bill Wasik, “In the Programmable World, All Our Objects Will Act as One,” Wired, May 14, 2013, www.wired.com/2013/05/internet-of-things-2/all.
24. iOS Access for All, link to author’s site for purchase: www.iosaccessbook.com.
26. iConnected, WorldCat listing: www.worldcat.org/oclc/820108777.
31. iPads in the Library, WorldCat listing: www.worldcat.org/oclc/816512996.
32. Using Mobile Technology to Deliver Library Services, WorldCat listing: www.worldcat.org/oclc/810119077.
34. Self-study version of Apps for Librarians and Educators on Udemy: www.udemy.com/apps4librarians/?couponCode=ALATECH.
35. Self-study version of the Book as iPad App on Udemy: www.udemy.com/bookapps/?couponCode=ALATECH.