

Opportunities for Libraries and Further Resources

Since librarians care about providing access for everyone of all ages and all abilities, it's important to have an understanding of how the move toward mobile computing with natural user interfaces can help our users. Understanding accessibility as part of a larger system that helps everyone will help keep it from being sidelined as an add-on for when we have extra time or extra money—and how often does that happen?

This report is meant to be a starting point to help you get a sense of where mobile learning is going. With this knowledge, you can begin to offer services that help your users leverage these technologies. Here are a few ideas to get you started with implementing this knowledge.

Create Guides, Online and in Print, That Recommend the Best Mobile Technologies

You could make guides to apps and devices using the Apple's accessibility categories, mentioned in chapter 1:

- vision
- hearing
- physical and motor skills
- learning and literacy

Alternatively, you could offer guides to particular apps and devices grouped by the categories of NUIs used in chapter 1:

- touch
- sound
- sight

An example might be a guide to apps that help you focus and concentrate—good for those with learning disabilities or Autism Spectrum Disorder, but also useful for everyone. See “The Best ADHD iPhone and Android Apps of the Year” for some ideas.

Another idea might be creating a guide to the best touchscreen apps for studying human anatomy. There are many useful anatomy apps beyond the ones mentioned in chapter 1. See “The Best iPad Apps for Anatomy.” Adapt these ideas to topics relevant to your communities.

The Best ADHD iPhone and Android Apps of the Year

www.healthline.com/health/adhd/top-iphone-android-apps

The Best iPad Apps for Anatomy

www.apppicker.com/applists/23751/the-best-ipad-apps-for-anatomy

Offer Workshops on How to Use These Technologies

Your library could also offer workshops, by your own staff or by invited experts. You could partner

with your institution's office of accessibility or other experts in your community.

If you think of accessibility as for everyone, and not just for people with particular disabilities, it helps set the context for a more accessible world for all. Your workshops could be for a wider audience than just people with specific disabilities. Here are some workshop ideas:

- Talk to Your Devices: The Best Apps and Tools for Talking to and with Your Mobile Devices
- Listen to Your Readings: The Best Audio Narration Tools and Apps for Listening on the Go
- Supplement Your Language Learning with Google Translate: Useful Features for Communicating with Everyone
- iPhone and Android Accessibility Features for All: Learn How to Use Accessibility Features of Your Smartphone Whether or Not You Have a Recognized Disability

Provide Devices That People Can Use Together with Their Own Smartphones or Tablets, Such as Large Screens, Smart TV Systems, or Amazon Echo

Since there are so many useful applications for multiple devices, it makes sense for libraries to provide options for using those larger, more expensive devices that people may not have at home. You may outfit a special room with smart TV systems, for example, that can be reserved for use by groups with their smartphones and tablets.

Support Training for Your Staff in These New Technologies

When your staff has a basic familiarity with some of the options available, they can better assist users and point them to accessible solutions for their learning and knowledge creation. See the final section of this chapter for some recommended online courses.

Keeping in Touch

I hope you will implement some of the ideas for how librarians can empower their communities with this knowledge. I would love to hear from you with feedback on this report and also to hear about how your library is offering innovative services with mobile technologies.

I welcome feedback from readers
<http://nicolehennig.com/contact-me>

Questions to Consider

As you've read through these examples, you may have some doubts or questions coming to mind. Questions such as these:

- How can we bring these technologies to those who can't afford them?
- What are the ramifications for privacy and security?
- How can we keep up with understanding these new technologies?

Of course, these are the same questions that come up for all new technologies. We live in a world of unequal access where more than ever we hear about privacy and security breaches. And the pace of change keeps getting faster. There is some good news, however.

How Can We Bring These Technologies to Those Who Can't Afford Them?

The digital divide is an ongoing problem and not easily solved, but there is some good news when it comes to mobile devices. They are coming down in price, and more people around the world are able to afford them.¹ As of mid-2014, the number of unique mobile phone users around the world has passed 50 percent of the world's total population and is still growing rapidly.² Even in developing countries, such as in parts of Africa where electricity is not everywhere, the problem is being solved by the use of low-cost solar panels from China.³

Often, a smartphone or tablet with an excellent app is much, much cheaper than previous generation stand-alone devices for specific technology problems. For example, you might think that the price of an iPad with a \$250 touch-to-speak app like Proloquo2Go is expensive, but it can replace previous technology for disabled users that cost around \$8,000.⁴

Proloquo2Go
www.assistiveware.com/product/proloquo2go

Some libraries are helping bridge the divide by loaning out Wi-Fi hotspots, laptops, and iPads to their communities.⁵ As always, we can continue to work toward access for all in ways like these.

What Are the Ramifications for Privacy and Security?

Rather than being paralyzed by media stories about security breaches, you can learn best practices for mobile security and cloud computing. A good starting point is Surveillance Self-Defense from the Electronic Frontier Foundation. Start by reading EFF's short document "An Introduction to Threat Modeling," which can help you think through what levels of security you might need for different types of information. Security best practices for mobile computing is a topic also covered in my online self-paced course, *Organize Your Life with Mobile Apps*.

As for privacy, I would suggest using the principles and guidelines that have been in place for a while, such as ALA's guidelines on privacy in the Library Bill of Rights.⁶ Librarians have long been advocates for privacy and we will continue to serve in that way.

When thinking about privacy and security implications of new and near future technologies, some of the best sources to read are research reports from the Pew Research Center: Internet, Science, & Tech. Sign up for new report alerts on the website.

Surveillance Self-Defense, Electronic Frontier Foundation
<https://ssd.eff.org>

An Introduction to Threat Modeling, EFF
<https://ssd.eff.org/en/module/introduction-threat-modeling>

Nicole Hennig, Organize Your Life with Mobile Apps
<http://nicolehennig.com/courses/organize-life-mobile-apps>

Privacy: An Interpretation of the Library Bill of Rights
www.ala.org/advocacy/intfreedom/librarybill/interpretations/privacy

Pew Research Center: Internet, Science & Tech
www.pewinternet.org

How Can We Keep Up with Understanding These New Technologies?

It's easy to get overwhelmed at the pace of change, and keeping up has long been a challenge for all of us. However, there are some excellent resources in different formats that are useful for keeping up with the world of mobile technologies. See the next section for recommended newsletters, reports, books, and online courses.

Continue Your Learning

If you would like to continue learning about the topics in this report, take a look at the following recommended books, articles, websites, and online courses. These are some of the best available for keeping up with the topics covered in this report.

Books

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Brisbane, Shelly. *iOS Access for All, iOS 8 Edition*. Self-published, 2014. E-book, available as an EPUB or PDF file on the author's website. Free sample chapter available. www.iosaccessbook.com. Look for the iOS 9 version of this e-book to be released on her website in 2016.

Harvell, Ben. *iConnected: Use AirPlay, iCloud, Apps, and More to Bring Your Apple Devices Together*. Indianapolis, IN: Wiley, 2013. www.worldcat.org/oclc/820108777.

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Articles

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Apple. "Accessibility Tips and Tricks." <https://www.apple.com/ios/accessibility-tips>.

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APP LISTS FOR EDUCATIONAL APPS

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Apple Watch Education Apps. <https://www.participate.com/collections/apple-watch-education-apps/b2e26bd5-52e0-4a8f-a3fe-221dd877fdc4>.

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"Content Creation with Mobile Apps." Pinterest board by Nicole Hennig. <https://www.pinterest.com/nic221/content-creation-with-mobile-apps>.

Ed Tech Teacher. App search by learning activity or mobile device. <http://edtechteacher.org/apps/#Begin>.

Participate Learning. Database of educational apps, <https://www.participate.com>, and app reviews, <https://www.participate.com/articles>.

Online Courses and Newsletters

23 MOBILE THINGS

23 Mobile Things: Exploring the Potential of Mobile Tools for Delivering Library Services. <http://23mobilethings.net/wpress/about>.

23 Things is a wonderful model for self-paced technology training for library staff. Over a period of several weeks, people learn by following a blog that each week introduces one or two "mobile things" and sets a task for participants. Participants blog their progress on each "thing" and share information. It's self-paced during a period of several months and gives learners a chance to learn and explore new technologies over time, with community discussion. To learn more about the origins of this framework, see Helene Blowers's blog post "6 Years of 23 Things."

Many libraries have adopted this approach for their local or regional training; see the post "Remix" on the *23 Mobile Things* blog. In early 2015 I had the pleasure of presenting several of the included webinars for a 23 Mobile Things program offered by NEFLIN, (Northeast Florida Library Information Network). See NEFLIN's 23Things website.

This method of learning has proven itself very effective. Learn more about the outcomes in this research report in Michael Stephens's research report, "23 Mobile Things: Self-Directed and Effective Professional Learning."

6 Years of 23 Things

www.heleneblowers.info/2012/08/6-years-of-23-things.html

Remix

<http://23mobilethings.net/wpress/remix-2>

NEFLIN: 23 Things

<http://23things.neflin.org>

23 Mobile Things: Self-Directed and Effective Professional Learning

<http://tametheweb.com/2014/09/23/new-article-23-mobile-things-self-directed-and-effective-professional-learning>

APPS FOR LIBRARIANS

Apps for Librarians: Empower Your Users with Mobile App Literacy. <http://nicolehennig.com/librarian-app-experts>.

Since 2012 I've been offering this course to librarians and educators, updating it each year. It's a five-week online course designed to help you become an app expert for your community. It covers a wide variety of mobile apps in the areas of e-reading, productivity and writing, reference, multimedia, accessibility, and more. It includes video screencasts of apps, interesting readings, group discussion forums, and optional weekly live chat sessions. Assignments include weekly app reviews that you share with classmates for discussion. Many librarians and educators have gone on to offer their own workshops and guides for their communities after taking this course. See the testimonials online to hear from previous students. I offer this course a few times per year via American Library Association eLearning.

Testimonials for courses by Nicole Hennig

<http://nicolehennig.com/courses/testimonials>

If you prefer to work at your own pace with no deadlines, I also offer a self-study version of the course, available to begin at any time (with content updated yearly for no extra charge).

Visit my website to learn about my other online courses on mobile technologies.

Apps for Librarians self-study version

<https://www.udemy.com/apps4librarians/learn/?couponCode=HENNIG1>

Nicole Hennig, online courses on mobile technologies

<http://nicolehennig.com/courses>

SELF-STUDY COURSES FOR LEARNING ACCESSIBILITY FEATURE OF IOS AND ANDROID

Accessibility Features of iOS for the iPad and iPhone. Online course. Udemy. <https://www.udemy.com/accessibility-features-of-ios-for-the-ipad-and-iphone>.

Accessibility Features on Android. Online course. Udemy. <https://www.udemy.com/accessibility-features-on-android>.

These two self-paced courses are recommended if you would like to learn the specific accessibility features of iOS or Android. They were created by Sami Rahman, the CEO of SmartEdTech, a company that develops software for children with disabilities. Mr. Rahman has certification in an Assistive Technology Applications Program offered by California State University.

If you enjoy learning by watching video demos, these courses are recommended.

NEWSLETTERS

To stay current with the best apps for educational use, sign up for my free newsletter, *Mobile Apps News*. I cover the best new apps for use in educational settings and offer links to real-world examples of creative use and to thought-provoking articles about emerging technologies. From time to time I offer discounts on my books and courses. When you sign up, you'll get a free PDF copy of my guide, "10 Tips for Finding the Best Apps."

Mobile Apps News by Nicole Hennig

<http://nicolehennig.com/mobile-apps-news>

Notes

1. For many interesting and useful statistics, see Simon Kemp, "Digital, Social & Mobile Worldwide in 2015," special report, *We Are Social*, January 21, 2015, <http://wearesocial.com/uk/special-reports/digital-social-mobile-worldwide-2015>.
2. Simon Kemp, "Half the World Now Has a Mobile Phone," *We Are Social* (blog), September 3, 2014, <http://wearesocial.net/blog/2014/09/world-mobile-phone>.
3. Steven Sinofsky, "Africa's Mobile-Sun Revolution," *re/code*, April 29, 2015, <http://recode.net/2015/04/29/africas-mobile-sun-revolution>.
4. Zoe Fox, "4 Ways iPads Are Changing the Lives of People with Disabilities," *Mashable Asia*, July

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5. Katherine Bates, "Why City Libraries Are Lending WiFi Hotspots to Low-Income Residents," *CitiesSpeak* (blog), National League of Cities, June 11, 2015, <http://cityspeak.org/2015/06/11/>

[why-city-libraries-are-lending-wifi-hotspots-to-low-income-residents](#).

6. Sarah Lamdan, "Librarians as Feisty Advocates for Privacy," *Urban Library Journal* 21, no. 2 (2015), <http://ojs.gc.cuny.edu/index.php/urbanlibrary/article/view/1666>.