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Implications of a Mobile Computing World for Academic Libraries and Their Users

Merrill Johnson
George Fox University

Robin Ashford
George Fox University, rashford@georgefox.edu

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Implications of a Mobile Computing World for Academic Libraries and Their Users

2013 Snezek Library Leadership Institute
Westmont College, Santa Barbara, CA July 19, 2013

Merrill Johnson, Dean of Libraries, George Fox University
Robin Ashford, Ref & E-Learning Librarian, George Fox Univ

What is a Mobile Device?



Working Definition: Mobile

- Distinguishing features: mobile operating system, touchscreen, internet connectivity, use of apps.
- Mobile devices:
 - Smartphones & similar devices
 - Tablets

Evolution of Mobile

Smartphones:

- Introduced in 2007; by end of 2012 over 1 billion sold around the world.
- According to the 2012 Educause Center for Analysis and Research (ECAR) 2012 Study: 62% (2012) of students own smartphone; up from 55% (2011).
- 67% of students say they use for academic purposes, up from 37% in 2011.
- Among students who use a smartphone for academics 44% use an iPhone, 46% use an Android device.

Evolution of Mobile

Tablets:

- Over 200 million shipped between 2009 and 2012. Projected over one billion will ship in next five years.
- A third (34%) of American adults ages 18 and older own a tablet computer.



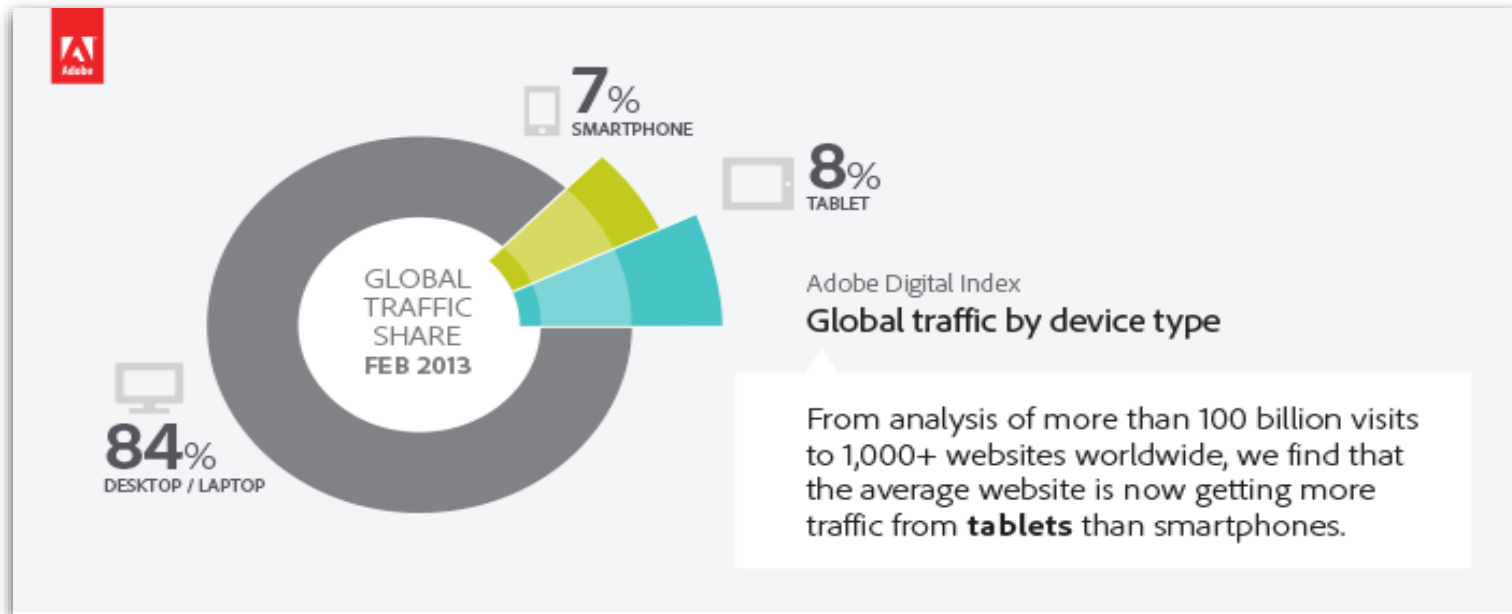
Evolution of Mobile - Apps

- First quarter of 2013 alone more than 13.4 billion downloads across four major app stores.
- Apple's App Store topped 40 billion downloads at end of 2012, with nearly 20 billion in 2012 alone.

Fact: the number of minutes people spend on average each day on mobile apps in the U.S. is 94 -flurry.com



Evolution of Mobile



[Adobe Digital Marketing - Tablets trump smartphones in global website traffic](#)

Evolution of Mobile

At GFU, during past three years over 50+% of devices using wireless network are mobile.

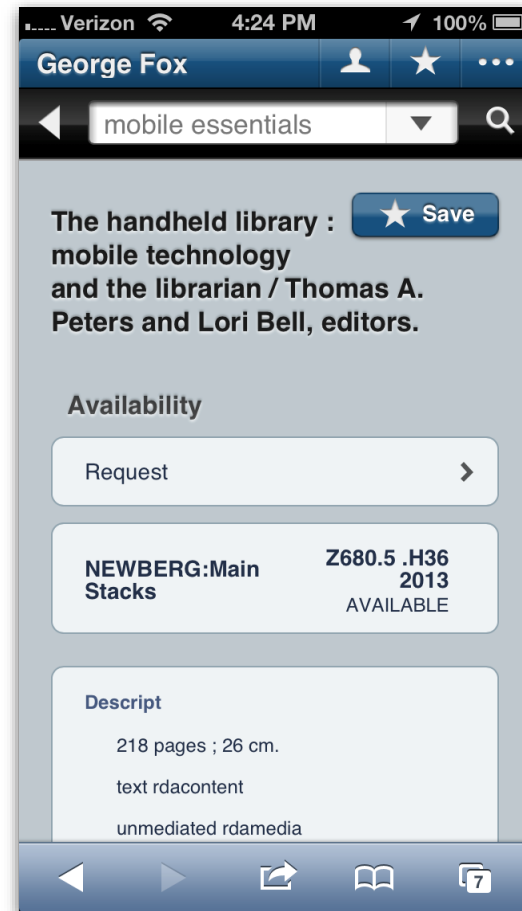
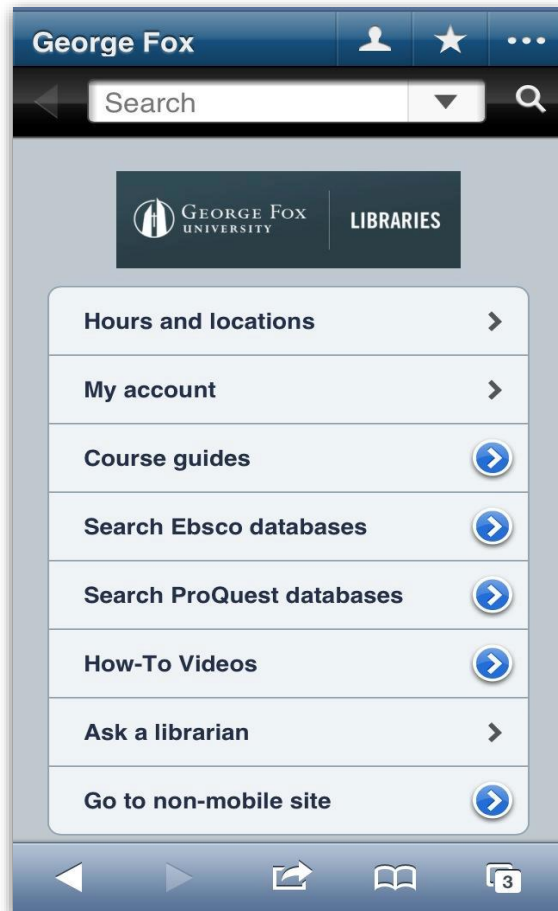


Evolution of Mobile in Libraries

- By 2010 44% of academic libraries nationally offered some type of mobile library service.
- 2012 pacific northwest library survey revealed 52.7% had a mobile-friendly web-site; 48.6% had a mobile friendly catalog interface.

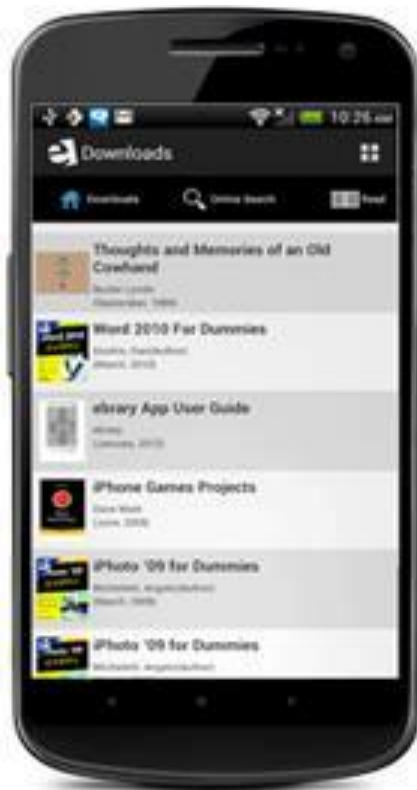
History and Evolution of Mobile @ GFU Library

GFU libraries launched mobile site in fall 2010. Included catalog.



History and Evolution of Mobile @ GFU Library

Incorporated mobile access from database vendors (e.g., ebrary and EBSCOhost) into user education.



Assessment of Mobile @ GFU Library

- 150% increase in mobile device visits to library web site: 2,068 in 2011/12; 5,167 in 2012/13.
- 3,296 visits to library mobile site in 2012/13.
- Formal evaluation in the near future.

What the Mobile OS Means for Libraries



From Standard Operating Systems...



...to Mobile Operating Systems (it's not just a smaller screen)



iPhone
iOS (Apple)



Nexus 7 Tablet
Android OS (Jelly Bean)



Reaching Our Mobile Users

Considering a library app or mobile presence of some kind?

There are a few options...

Native App, Mobile Site, Responsive Web Design

Native app

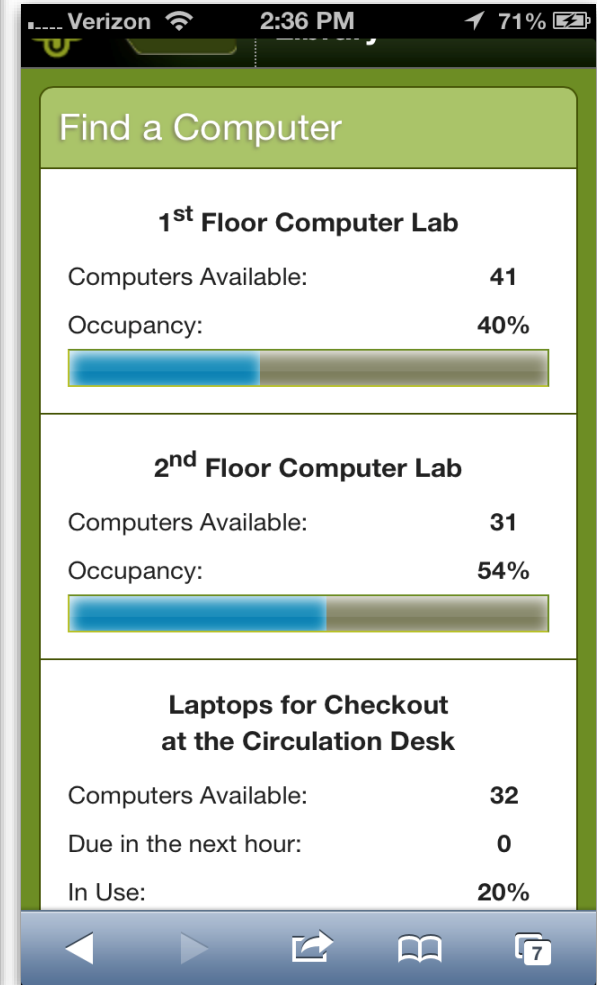
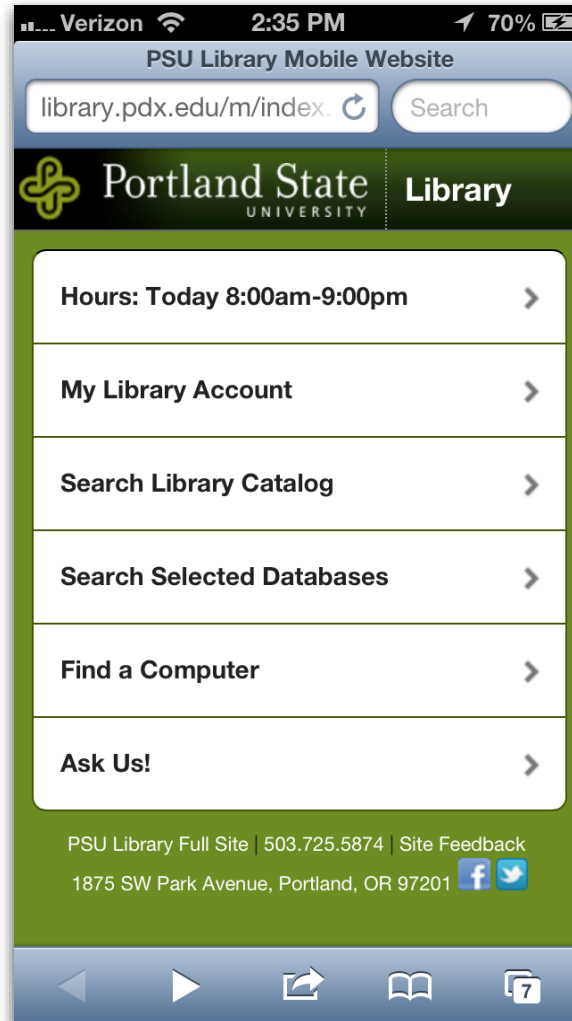
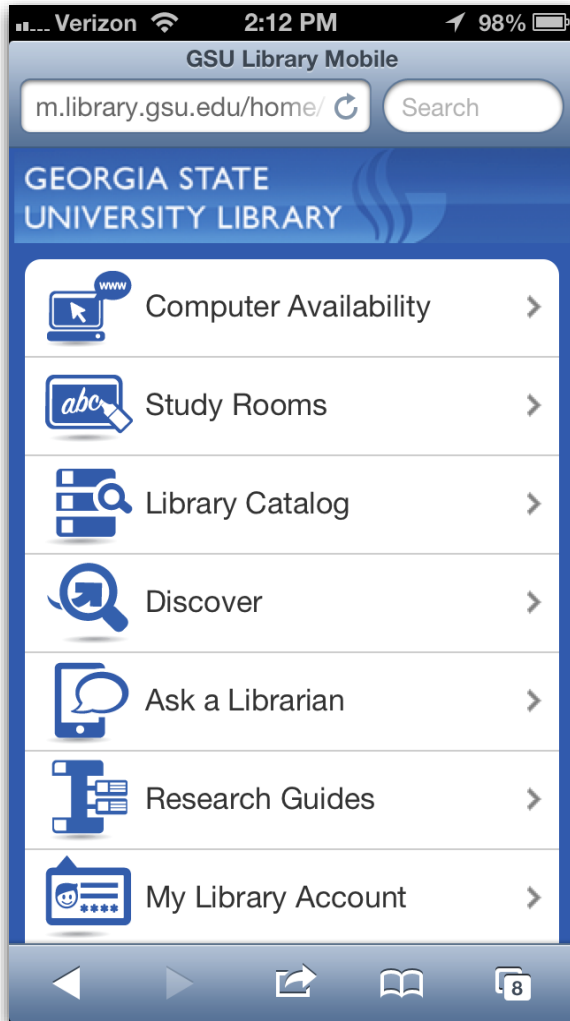
A software application developed specifically to run on the architecture of a mobile device, and which is downloaded, purchased, and upgraded through a central distribution portal (such as the App Store).

Definitions - [Stanford IT - Web Publishing for Mobile Terminology](#)



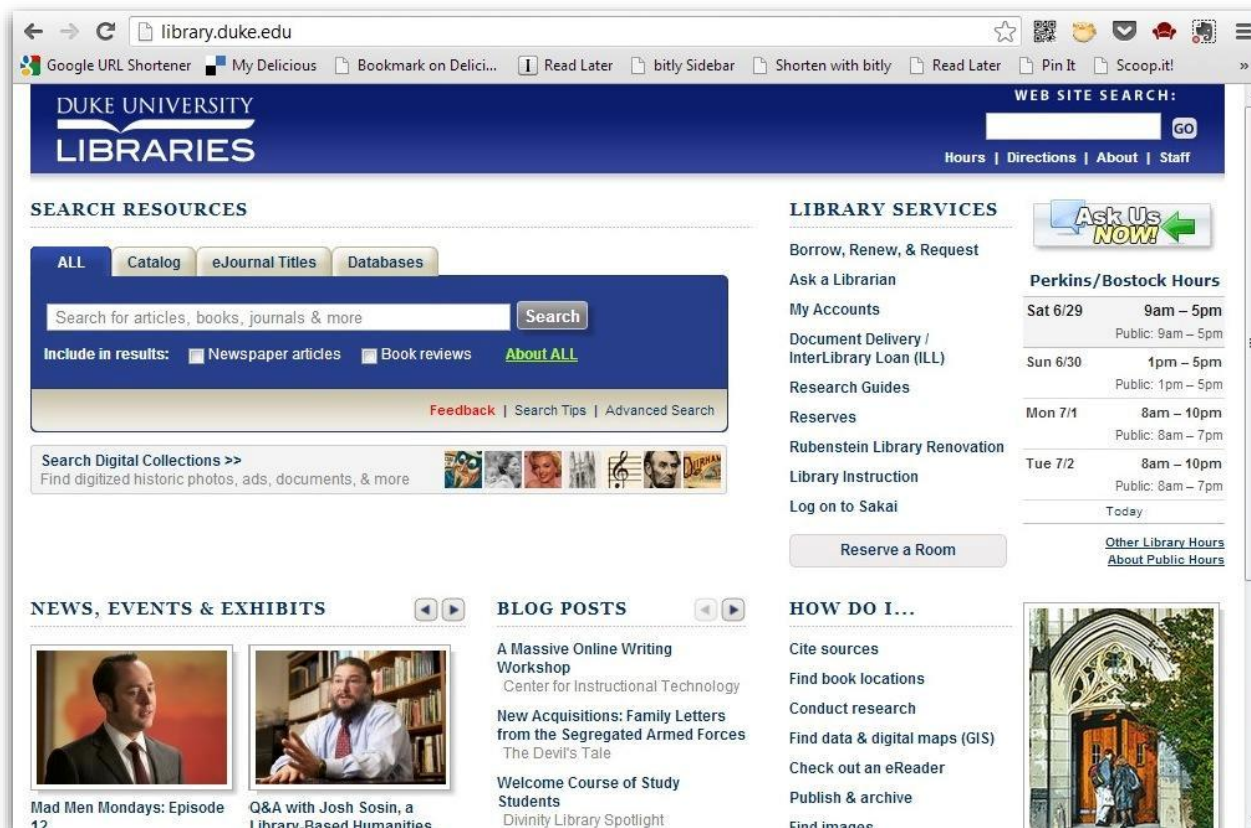
Native App, Mobile Site, Responsive Web Design

Web app: Uses web browser technology on the Internet to display a mobile URL on a device, often with a different appearance than the corresponding desktop website.

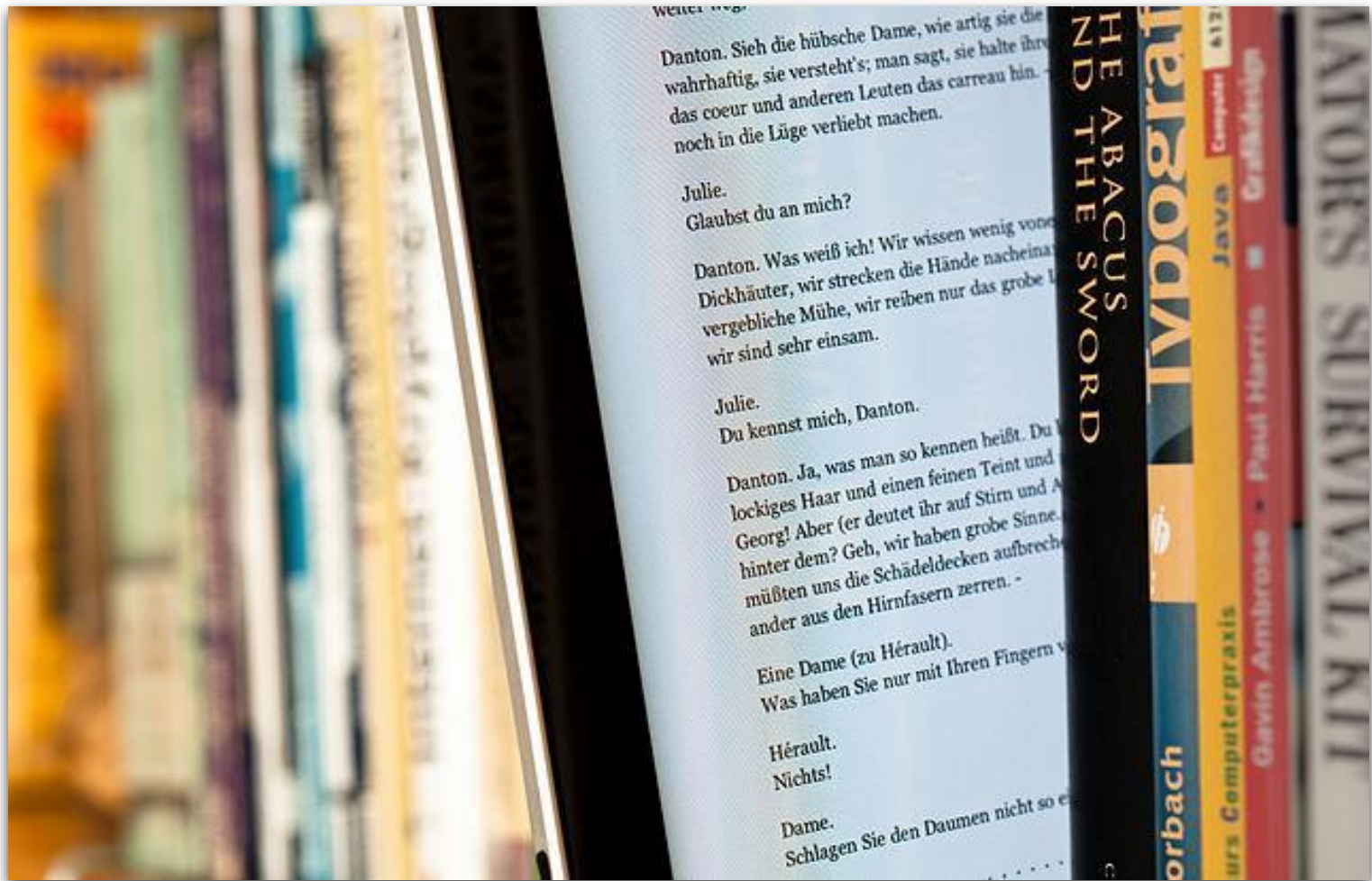


Native App, Mobile Site, **Responsive Web Design**

Responsive web design: A website that responds to the device that accesses it and delivers the appropriate output for it uses responsive design.



Digital Content: E-books and DRM



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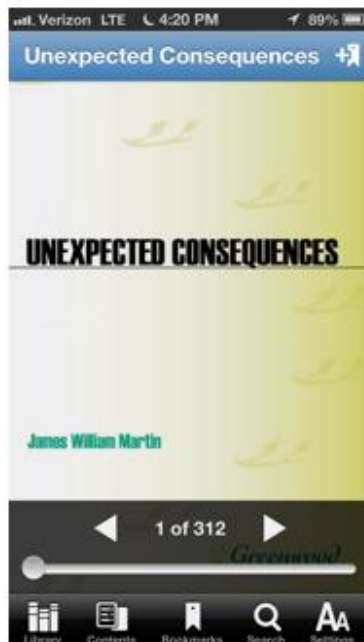
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Free Bluefire App for iPad, iPhone and Android Devices

Apple and Android devices: [Bluefire Reader](#) is recommended

A [free Adobe ID account](#) must be created, the Bluefire Reader app will prompt for an Adobe ID login and password to authorize before e-books can be downloaded.

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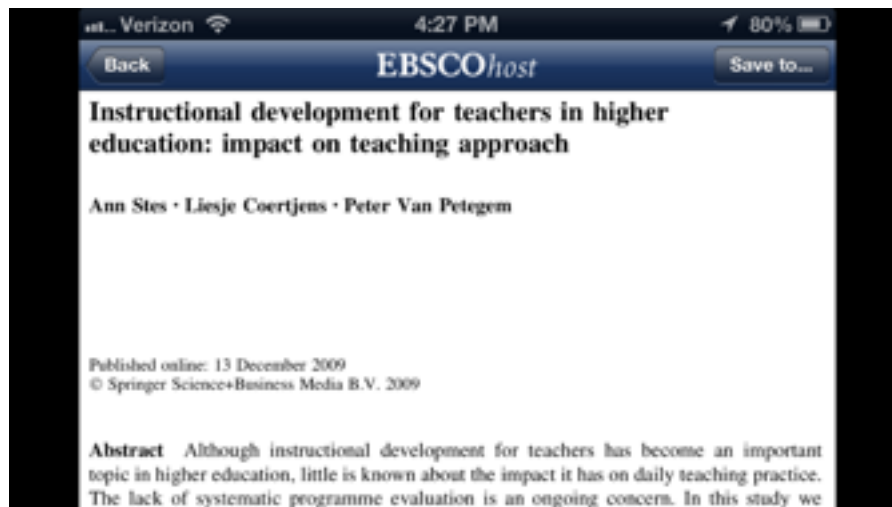
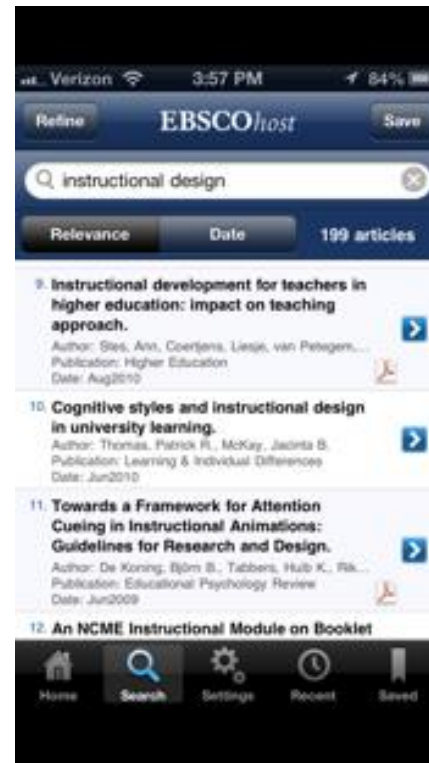
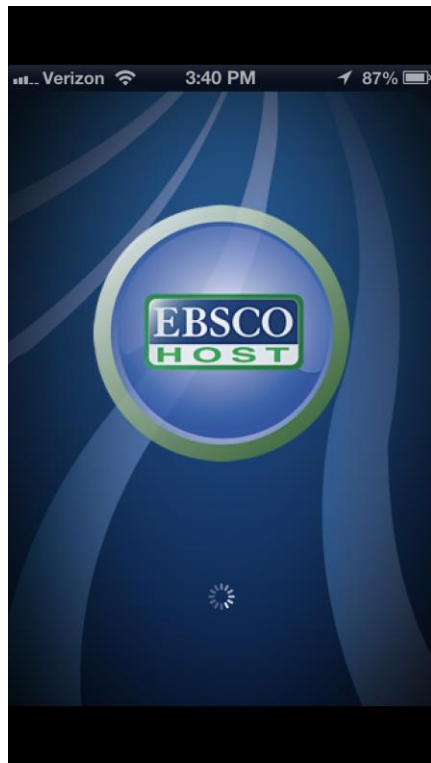
Transfer EBSCO ebooks to a Mobile Device

Popular Devices that Are Compatible with EBSCOhost E-book Download include:

- Barnes & Noble NOOK
- Sony Reader Daily Edition™
- Sony Digital Readers (PRS-300, 505, 600 and 700BC)
- [And many more...](#)
- iPad (works with third-party applications BlueFire)

Library Vendors: Developing for the Mobile Market





After installing the app on your device, it must be authenticated from the EBSCOhost or EBSCO Discovery Service interface. To authenticate the EBSCOhost app:

1. Log into EBSCOhost.
2. Click the **EBSCOhost iPhone and Android Applications** link at the bottom of the page and enter an email address which you can access from your device. An email with an authentication key is sent to you.
3. Access the email **from your device** and click the link found in the email to authenticate the application. You have 24 hours to access the key.

Apps for Research & Education

Mobile Apps for Research & Education Tags: [mobile](#)

Use this guide to learn about useful apps - Explore and download from your smartphone or tablet.

Last Updated: Jun 22, 2013 URL: <http://libguides.georgefox.edu/MobileApps> [Print Guide](#) [RSS Updates](#) [SHARE](#) [f](#) [t](#) [e](#) ...

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Please take our poll!

- ☐ Your primary mobile device is an iPhone or iPod Touch
- ☐ Your primary mobile device is an Android smartphone

Welcome

Welcome to Mobile Apps for Research and Education!

Click on tabs above or links on left sidebar to browse
Free apps are specified, others range in price
Access guide on smartphone, iPad/tablets for easy downloading of apps



Note: Text within guide copied from or based on description text on app pages - Guide development is ongoing.

Librarian



Robin Ashford, MSLIS



Contact Info

Phone: 503.554.6136

The best way to reach me is by Email:
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Papers for Research

Papers App link can be found on the right sidebar under Misc. Research for iPhone, iPod Touch, iPad, Mac & PC


Conduct Library Research

Click links or images to page with app choices or app store to download - Follow instructions to authenticate as GFU students or staff when required




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Nursing Reference Center

Nursing Reference Center™ (NRC) is a comprehensive reference tool designed to provide relevant clinical resources to nurses, directly at the point-of-care. This free app is available for staff nurses, nurse administrators, nursing students, nurse faculty and hospital librarians with an institutional subscription to NRC. For iPhone/iTouch, iPad. Free.




Gale AccessMyLibrary College Edition

After a simple, one-time log-in using your GFU library password, the mobile app will give you free, unlimited access to your school library's reputable, authoritative Gale online resources — anytime, anywhere! For iPhone, iPod Touch, iPad & Android. Free.



Nature Journals

The Nature Journals app brings you the latest scientific news and research when and where you want it. Download the latest issues to browse at your convenience. Zoom in on figures and images. Save your searches and synchronize your bookmarks across devices. And share your favorite articles. For iPhone, iPod Touch, iPad. Free.



SciVerse Science Direct

Need full-text but not at your desk? The SciVerse ScienceDirect app doesn't restrict your brainwaves to the workplace; now you can find and read your subscribed Elsevier article or book chapter while you're at a conference, travelling to and from work, or enjoying some rare

More Mobile for Research

The following mobile sites:

- may work best on smartphones
- may require GFU users to authenticate
- may provide access to full-text while on campus network only

- [PubMed Mobile](#)
- [SciFinder Mobile](#)
- [LexisNexis Academic](#)
- [JSTOR](#)
- [Cambridge Journals Online](#)
- [Wiley Health Sciences Journal Apps](#)
- [Counseling and Therapy in Video: Using Your Mobile Device](#)
- [Music Online: Using Your Mobile Device](#)

[Comments \(0\)](#)

Misc. Research

- [Papers](#)
Papers puts your entire research literature database in

<http://libguides.georgefox.edu/MobileApps>

Teaching Library Instruction Classes on Mobile

(for programs gone mobile)



Blog Post: <http://librarianbydesign.blogspot.com/2012/06/teaching-library-research-on-ipad.html>

Helpful Services for Mobile Users



Print
from your
**Smartphone,
Laptop or Tablet.**

Powered by **PrinterOn®**



Print from your
Smartphone, Laptop or Tablet



1 Forward an attachment or email to this HotSpot Printer:

Email:

lesterlibrary@printspots.com

Or visit the URL below and follow the on-screen instructions. Your private print release code(s) will be emailed back to you. Move to step 2, once code(s) are received.

URL:

www.printeron.net/lester/library

2 Press "OK" on the printer-keypad, then enter the release code(s) and press "OK" to confirm. Follow the instructions on the printer's display to print.





Tablets for loan at Nevada State College Library

**Checkout an iPad from the
Marydean Martin Library!**

**Each iPad comes with a
keyboard and a protective case.**



<http://bit.ly/XVI9qC>



Learn more: <http://nsc.nevada.libguides.com/ipads> (QR Code resolves to the libguide to learn more)

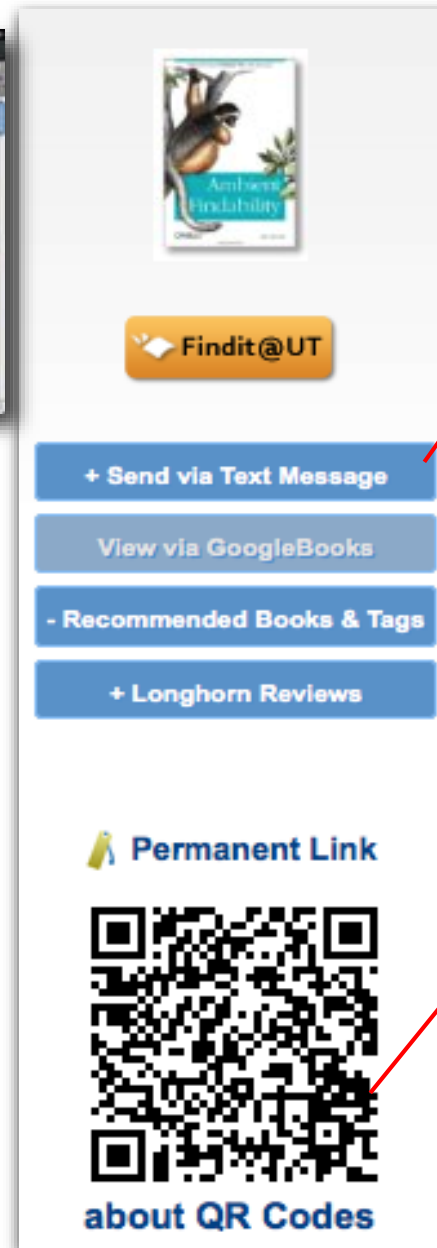


24-hour Texting

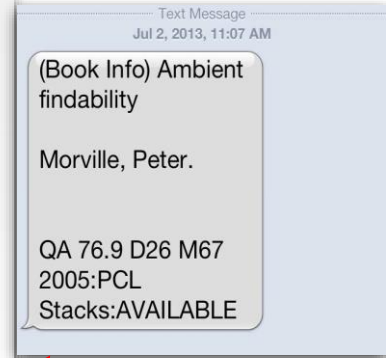
24-hr texting at VCU



Reference help for student questions using Google Hangouts on iPad



UTexas Library Catalog



Scanning library card





QR (quick response) Codes

- Fad, trend, practical?
- How long will QR codes stick around?
- Will they mainstream in North America?
- Does it matter?

Thoughtful strategies for helpful QR codes...



Library's mobile site
<http://bit.ly/librarymobile>



Home
Albertsons Library

- Find Us on Campus >
- Find Books/Articles... >
- Find in our Building >
- Find Help >
- Hours >
- Computers Busy? >

(208) 426-1234 | [Full Website](#)

* Download a free scanner app at
<http://bit.ly/fjGqz9>

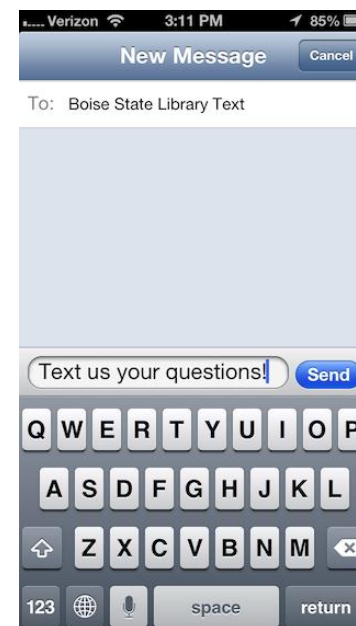
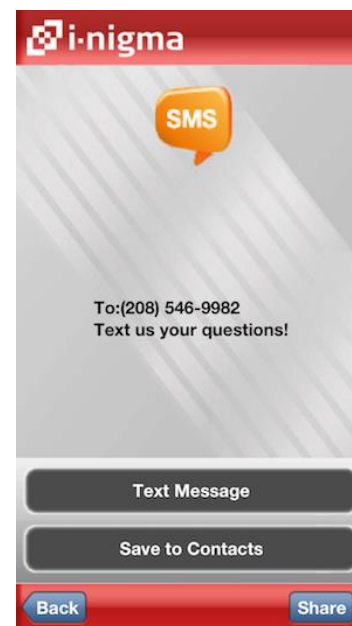
Albertsons Library Mobile Reference

How to scan a QR code:

1. Start the scanner application*
2. Point the phone's camera to the QR code
3. The phone will read the code and display its information



Reference Help via
Text Messaging
(208) 546-9982



LIBRARY QR CODE AUDIO TOUR STOPS

- Step 1 View each tour segment (30 MIN)
Step 2 Complete worksheet on reverse (15 MIN)

NEED HELP WITH QR CODES?
<http://guides.lib.byu.edu/qrcode>

PLEASE TAKE THE SURVEY
Go to QR Code page for link

Introduction



Conclusion



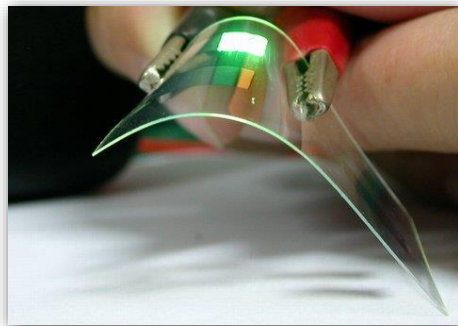
Marketing and Education at BSU Albertsons Library
<http://guides.boisestate.edu/QRcodes>

[QR Codes & Libraries: The Library Audio Tour](#) at BYU Library by M. Whitchurch
[Audio Tour Map](#)

Changing Mobile Landscape - New and Soon: Phablets, OLED Displays - YOUMs and more

Phablets = 5" - 6.9" displays

OLED = flexible screens



[OLED Wikipedia](#)



[OLED-Info Samsung YOUM](#)

New Reading Experiences - [NYPL Biblion Award Winning iPad App](#)

- Free!

Biblion

THE BOUNDLESS LIBRARY

**New challenges. New paradigms.
New ways of reading.**

It is with great excitement that we welcome you to The New York Public Library for the 21st century with the relaunch of our distinguished journal *Biblion*, now completely rethought and redesigned for the iPad. The Greek word *biblion* originally meant "a strip of papyrus"; in the Middle Ages, it was applied to collections of fragments of ancient texts. Today, NYPL's digital *Biblion* transforms texts — ancient and modern — into a new format for new generations of readers.

This publication, rechristened *Biblion: The Boundless Library*, provides journeys through the Library's vast collections. The entire app, as you will see, is designed to take you — all but literally — into the Library's legendary stacks, opening up



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Convergence of Print & Digital - Reading and Learning Experiences with Augmented Reality (AR)



[NYTimes AR Example](#)

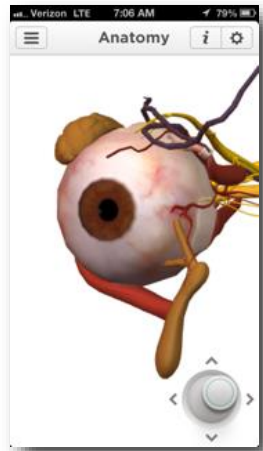


[Playing with the AR App IMAG-N-O-TRON](#)



Playing with Flying Morris in the GFU Library

Emerging Tech and Looking Forward - AR Educational Applications



Ex: Macular Degeneration - EyeDecide App

[AR medical app for patient education](#)



[Aurasma Site](#)



[Augmented Reality - Teaching and Learning with Aurasma](#)

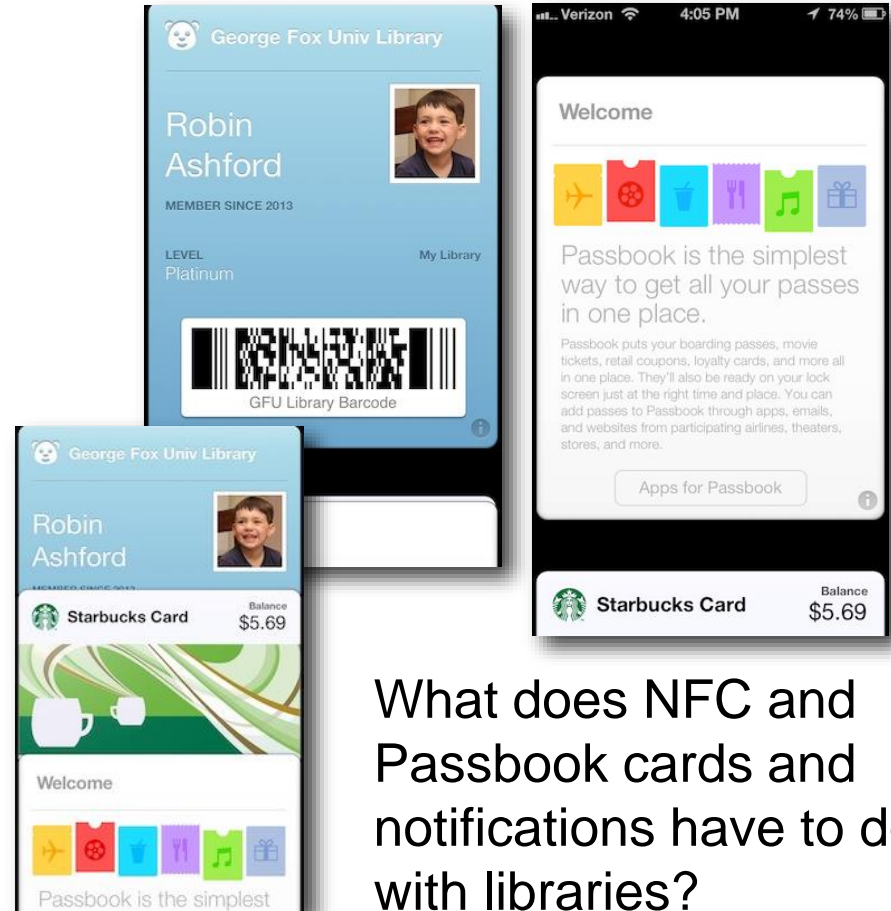
Emerging Tech - Smarter Smartphones

NFC (near field communication), Apple Passbook and more



[Apple Passbook vs. Google Wallet](#)

Will hardware or software win the mobile payment game?



What does NFC and Passbook cards and notifications have to do with libraries?

Examples: NFC tags can replace QR codes, walking by the library with a passbook card your smartphone notifies of a book ready for pickup on the hold shelf, etc.

Thank you!

References and image credits on following slides.

References

ABI, R. (1). U.S. Consumer Tablet On-device Spending Soars with 22% of Users Spending More Than \$50 per Month, Says ABI Research. *Business Wire (English)*

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[Online NW Full Presentation](#)

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Image Credits / Reading List

Image slide #13 Computers by [Valley Library \(Oregon State University\)](#)

Image slide #13 Mobile devices by [Joint Base Lewis McChord](#)

Image slide #13 Students in library study room by [East Georgia State College](#)

Image slide #15 Mobile OS image of hand with Sony mobile Xperia™ smartphones by [vernieman](#)

Image slide #27 Smartphone Printing by [Lester Public Library](#)

Image slide #29 Scan library card iPhone by [Brian Herzog](#)

Pre-session reading list:

Dresselhaus, A., & Shrode, F. (2012). Mobile Technologies & Academics: Do Students Use Mobile Technologies in Their Academic Lives and are Librarians Ready to Meet this Challenge?. *Information Technology and Libraries*, 31(2), 82-101. <http://ejournals.bc.edu/ojs/index.php/ital/article/view/2166>

Thomas, Lisa Carlucci (2012, February 7). The State of Mobile in Libraries 2012. *The Digital Shift*. <http://www.thedigitalshift.com/2012/02/mobile/the-state-of-mobile-in-libraries-2012/>.

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