MOBILE INFORMATION LITERACY CURRICULUM

Module 2 Guide: A Mobile Lens on the Internet

Sheryl Day
April 2015
HENRY M. JACKSON SCHOOL OF INTERNATIONAL STUDIES (JSIS)

The Henry M. Jackson School of International Studies (JSIS) combines the social sciences, humanities, and professional fields to enhance our understanding of our increasingly interconnected globe. The school is named for late Senator Henry M. Jackson, in recognition of his interest and support for the school and for the field of international affairs. The Jackson School’s commitment to regional, cross-cultural, and comparative studies extends well beyond the boundaries of its many formal academic programs. The school has eight Title VI National Resource Centers (NRCs)—Canadian Studies; East Asia Center; Center for West European Studies; International Studies; Middle East Studies; Ellison Center for Russian, East European & Central Asian Studies; South Asian Studies; and Southeast Asian Studies—Devoted to outreach and public education activities. Each NRC receives Foreign Language and Area Studies (FLAS) fellowships, awarded to graduate students throughout the University. The Jackson School is the number one recipient of NRC and FLAS awards in the country.

TECHNOLOGY & SOCIAL CHANGE GROUP

The Technology & Social Change Group (TASCHA) at the University of Washington Information School explores the design, use, and effects of information and communication technologies in communities facing social and economic challenges. With experience in over 50 countries, TASCHA brings together a multidisciplinary network of researchers, practitioners, and policy experts to advance knowledge, create public resources, and improve policy and program design. Our purpose? To spark innovation and opportunities for those who need it most.

ABOUT THE AUTHOR

Sheryl Day is a Ph.D. candidate at the University of Washington Information School.

ACKNOWLEDGEMENTS

The development of this curriculum would not have been possible without significant input from Daniel Amato and Dr. Jessica Beyer (both of University of Washington). Chris Coward and Mike Crandall (also from University of Washington) provided invaluable guidance on defining and situating the curriculum into the wider international efforts to extend information literacy to digital and mobile platforms. Pilot implementation of the curriculum and essential evaluative feedback on its application could not have been possible without Thant Thaw Kaung of Myanmar Book Aid Preservation Foundation and Zaw Zaw Htet Aung of Yone Kyi Yar Knowledge Propagation Society. Thanks also go to the Information Strategies for Societies in Transition project program directors Sara Curran and Mary Callahan and team members Chris Rothschild and Melody Clark (all of the University of Washington); and Catherine Beyer and Samantha Becker, also from the University of Washington.

This is a product of the Information Strategies for Societies in Transition program. This program is supported by United States Agency for International Development (USAID), Microsoft, the Bill & Melinda Gates Foundation, and the Tableau Foundation. The program is housed in the University of Washington’s Henry M. Jackson School of International Studies and is run in collaboration with the Technology & Social Change Group (TASCHA) in the University of Washington’s Information School, and two partner organizations in Myanmar: the Myanmar Book Aid Preservation Foundation (MBAPP) and Enlightened Research Myanmar (EMR).

ACKNOWLEDGEMENTS

Mobile information literacy, information literacy, digital information literacy, digital literacy, mobile-centric, mobile-first, mobile phones, smart phones, Myanmar, ICTs, libraries, curriculum, training, training of trainers, internet

RECOMMENDED CITATION


COPYRIGHT, LICENSE, DISCLAIMER

Copyright 2015, University of Washington. This content is distributed under a Creative Commons Attribution-ShareAlike 3.0 license.

The views, opinions, and findings expressed by the author of this document do not necessarily state or reflect those of the University of Washington, or the project partners.
# Table of Contents

ABOUT THE CURRICULUM ........................................................................................................... 4  
CURRICULUM DEVELOPMENT .................................................................................................... 5  
HOW OTHERS CAN IMPLEMENT THE CURRICULUM .............................................................. 5  
PREPARING FOR CONDUCTING TRAININGS .............................................................................. 6  
ABOUT THIS MODULE ................................................................................................................. 7  
MODULE 2: A MOBILE LENS ON THE INTERNET ........................................................................ 8
  OUTLINE ......................................................................................................................................... 8  
  ASSUMPTIONS ............................................................................................................................... 8  
  PREPARE AHEAD .......................................................................................................................... 8
  BACKGROUND INFORMATION ....................................................................................................... 8
  OVERVIEW ...................................................................................................................................... 8
  INTRODUCTION TO THE INTERNET ............................................................................................. 9
  INTRO TO THE WORLD WIDE WEB ............................................................................................. 10
  WEB BROWSERS .......................................................................................................................... 11
  ACTIVITY 2.1: IDENTIFYING BROWSER ELEMENTS & NAVIGATION ........................................ 11
  ACTIVITY 2.2: SEARCH THE WEB ACROSS PLATFORMS ......................................................... 12
  ACTIVITY 2.3: HYPERLINKS AND HYPERTEXT ....................................................................... 12
  ACTIVITY 2.4: TABS AND BOOKMARKS ..................................................................................... 13
  WRAP UP ...................................................................................................................................... 13
The Mobile Information Literacy curriculum is a growing collection of training materials designed to build information literacies for the millions of people worldwide coming online every month via a mobile phone.

Most information and digital literacy curricula were designed for a PC age, and public and private organizations around the world have used these curricula to help newcomers use computers and the internet effectively and safely. The better curricula address not only skills, but also concepts and attitudes. The central question for this project is: what are the relevant skills, concepts, and attitudes for people using mobiles, not PCs, to access the internet? As part of the Information Strategies for Societies in Transition project, we developed a six-module curriculum for mobile-first users. The project is situated in Myanmar, a country undergoing massive political, economic, and social changes, and where mobile penetration is expected to reach 80% by the end of 2015 from just 4% in 2014. Combined with the country’s history of media censorship, Myanmar presents unique challenges for addressing the needs of people who need the ability to find and evaluate the quality and credibility of information obtained online, understand how to create and share online information effectively, and participate safely and securely.

About the Curriculum

As millions of people come online across the globe through mobile devices, mobile information literacy is vital for those who have leapfrogged from traditional media to digital devices that provide instant access to information. Mobile information literacy is necessary to help people learn how to find and evaluate the quality and credibility of information obtained online, understand how to create and share online information effectively, and participate safely and securely. Mobile information literacy is critical to help people better consume, generate, and disseminate trustworthy information through both digital and traditional media.

The curriculum focuses on critical thinking in a digital environment of smart phones, mobile phones, and tablets, filling a critical gap in digital information literacy curricula. Existing curricular models assume people learn on a personal computer (PC). While this has been the case historically, the next billion people coming online will most likely learn on a mobile device. This has huge implications for how people get online, how they access and experience the internet, how much they produce in addition to consume information, and even how they conceptualize the internet itself. For instance, research shows that in Myanmar (and many other countries) more people use Facebook than the internet. Mobile-specific practices, such as zero-rating, mean people are coming online much more frequently through a handful of “walled garden” applications without an understanding of and similar access to the broader internet. Also, some mobile applications and websites don’t offer the full functionality of their PC counterparts.

The curriculum aims to address these differences and empower mobile internet users to be equal participants in the online world.

The curriculum includes the following six modules:

- Module 1: Introduction to Mobile Information and Communication Technologies (ICTs)
- Module 2: A Mobile Lens on the Internet
- Module 3: Basic Web Searching via Mobile Devices
- Module 4: Working Online and Using Information via Mobile Devices
- Module 5: Putting It All Together
- Module 6: Module 5 Project Presentations
Curriculum Development

Our initial efforts sought to combine several frameworks in creating a comprehensive mobile information literacy curriculum: **EU DIGCOMP**, **SCONUL**, and **Empowering 8**. At the time of our review there were none that explicitly addressed all of the skills, concepts and attitudes for mobile-centric users. The EU DIGCOMP framework explicitly acknowledges that no curriculum for the mobile environment has been developed. Nevertheless, once we identified our target group as beginner-level participants with no knowledge of the internet, World Wide Web, and mobile technology use, the EU DIGCOMP proved to be the most appropriate framework for designing a basic beginner-level curriculum. SCONUL and Empowering 8 were more appropriate for those with at least a minimum baseline digital information literacy.

How Others Can Implement the Curriculum

The curriculum and training guide were designed to be flexible and customizable, depending on the baseline skills of those being trained, and translated into other languages. In countries and contexts like Myanmar, where for many using a mobile phone marks their first experience with the internet and digital technology, these training materials can be used by various organizations, such as libraries and NGOs, to both train their staff and to build knowledge, skills, and mobile information literacy competencies within the populations they serve. In Myanmar the materials have been translated into Burmese, and master training sessions have been conducted to train library staff to further train their colleagues, as well as library patrons. Our partners in Myanmar have also conducted training sessions at the Ministry of Information.

The curriculum materials are offered here with a [Creative Commons Attribution-ShareAlike 3.0 license](http://creativecommons.org/licenses/by-sa/3.0/), so others are free to use, adapt, and share the materials with attribution. We are also available to help organizations create customized materials based on their particular country or regional contexts and literacy training needs.

If you have questions on the curriculum or would like more information on how we can help, please email us at [tascha@uw.edu](mailto:tascha@uw.edu). We also encourage individuals and organizations that use and adapt this curriculum and training to provide us with any feedback, ideas, and adapted materials. There are many ways you can do this: email [tascha@uw.edu](mailto:tascha@uw.edu), leave a comment and upload materials on the main Mobile Information Literacy curriculum webpage [http://tascha.uw.edu/mobile-information-literacy-curriculum](http://tascha.uw.edu/mobile-information-literacy-curriculum), and/or participate on our Facebook page [https://www.facebook.com/MobileInformationLiteracy](https://www.facebook.com/MobileInformationLiteracy).
Preparing for Conducting Trainings
By default, digital information literacy implies access to information on the internet. Technology often fails or can be difficult for many to use under time and pressure constraints. A good practice is to test run the presentation on the equipment in the facility well ahead of the actual training. This ensures that the presentation will go as intended and so trainers can determine and anticipate alternative options. Before conducting any presentation, trainers should be sure that:

- The training facility is equipped with the necessary materials and technology
- All equipment has been tested and is operational
- They are familiar with how to operate the equipment
- They have a backup plan for continuing the training should issues arise
About this Module

A Mobile Lens on the Internet

In this module, we will cover a brief overview of the development and evolution of the internet, the World Wide Web, and browsers. By the end of this module, you will have a basic understanding of the internet and the World Wide Web.

Prerequisites:

Module 1: Introduction to Mobile Information & Communication Technologies (ICTs)

Topics covered:

- Development and evolution of the internet, the World Wide Web, and web browsers

Questions you will be able to answer at the end of this module:

- What is the internet?
- What is the World Wide Web?
- What is the difference between the internet and the web?
- How do I find information on the internet?
- What are the advantages and disadvantages of the different ways to find information on the web?
- How do I save and share information that I find on the web?

How long does this module take?

1 hour, 20 minutes (80 minutes)
Module 2: A Mobile Lens on the Internet

Estimated total time: 1 hour, 20 minutes

Outline
1. Overview <1 min
2. Intro to the Internet 5 mins
3. Intro to the World Wide Web 5 mins
4. Web Browsers 5 mins
5. Break 5 mins
6. Activities 60 mins
   - Activity 2.1: Identifying Browser Elements & Navigation
   - Activity 2.2: Search the Web Across Platforms
   - Activity 2.3: Hyperlinks and Hypertext
   - Activity 2.4: Tabs and Bookmarks

Assumptions
- All participants have mobile devices such as smartphones or tablets.
- Wi-Fi is available at the facility for participants to access.
- Participants have completed Module 1: Introduction to Mobile ICTs

Prepare ahead
Review the activities and ensure that you set up any necessary demo requirements on your device ahead of the Module.

Background information
Many people do not have a clear understanding of what the internet is and the distinction between the internet and the World Wide Web, or Web for short. The web is only a small piece of the larger internet space. Understanding what the web is and its relationship to the internet prepares users to grasp fundamental concepts that are necessary for digital information literacy.

Overview
(<1 min)

Briefly introduce the title of this module, and what will be covered:

- This is Module 2: Intro to the Internet and the World Wide Web. In this module, we will cover a brief overview of the development and evolution of the internet, the World Wide Web, and browsers. By the end of this module, you will have a basic understanding of the internet and the World Wide Web and will be able to answer:
  - What is the internet?
  - What is the World Wide Web?
  - What is the difference between the internet and the Web?
  - How do I find information on the internet?
  - What are the advantages and disadvantages of the different ways to find information on the web?
  - How do I save and share information that I find on the web?
As a reminder, the best way to learn digital information literacy is by learning new concepts and then applying what you’ve learned. This workshop is designed to be highly interactive to help you learn new concepts and retain what you’ve learned. Feel free to interrupt if something is unclear.

Introduction to the Internet
(5 mins)
Encourage participants to be interactive and engage from the beginning by prompting them with:

[SLIDE: What is the internet?]

- So, let’s begin... What is the internet?
  If you receive few or no responses, prompt with: How many people have used the internet?
  Summarize: So, that’s [x] people out of [total number in workshop].
- How did you use the internet? What did you use it for?
- Summarize: So most of you use the internet for […] or Some of you use the internet for […] and others use the internet for [...].
- [Point to 1-3 students]: If someone asked you: ‘[name of student], what is the internet?’ What would you say? How do you reply?
  Acknowledge and summarize depending on answers with: Yes, that’s right... or Well, that was almost right...
- For most people, this is the internet. [click to show first image] I use my laptop or mobile device, ask for some information, and, [click to show “???”] through some magic, the answer appears.”
- The internet (short for “International Network”) is a network of networks. Many computers hooked up to many other computers. Some computers act as servers. They serve up information. Other computers act as clients. They ask for information, such as when you use your computer to find information. There are many different types of servers: the one most people are familiar with are web servers (that manage websites) [point out webservers in slide]. There are also [click to show mail server] mail servers (that manage email), [click to show FTP server] FTP servers (“file transfer protocol” that serve up files that you can download, [click to show multimedia server] multimedia servers (that manage things like streaming videos, music, etc.), [click to show RTC server] RTC servers (“real time communication servers” that manage chat, instant messaging, etc.), and other servers. All of these servers and the information they serve up [click to show arrows] are interconnected to form what we call the internet.
- So, the internet [click to show first line of definition] is a network of networks, [click to show second line] and this network forms an information infrastructure.

[SLIDE: Internet is a Network of Networks]

- So, what is the internet?
  [Everyone says together with you]: The internet [click to show rest of sentence] is a network of networks that forms an information infrastructure.
  Tip: you then may also want to randomly ask several participants the same question to reinforce for the group.
- But how are all of these devices connected together on the internet?

[SLIDE: How are Networks Connected?]
Computers were traditionally connected via a cable. Many cables connect many networks together. Of course, with new technologies, computers can also be connected without wires.”

When computers are connected together, we call this a network. Networks can be small, [click to show computers in buildings] for example, a few computers in a house or small office form a network [click to show lines connecting buildings]; or, they can be quite large, such as thousands of computers in a large organization in buildings across several countries. But [click to show global connection] just how are these servers, computers, and other devices networked together globally?

[Slide: Undersea Network Cables]

Networks across the world are connected via undersea cables. These undersea cables were once used for telegraph connections and connect landmasses separated by oceans. On land, internet Service Providers (ISPs), such as Oredoo, manage connectivity through the landlines to houses and buildings. And computers then connect to the buildings. As an aside: wireless devices can now connect to buildings and broadcast wireless signals to connect devices without cables. So, the global undersea cables are the infrastructure that connects this network of networks and the information within it to form the International Network, [click to show text and animation] or internet, for short.

Intro to the World Wide Web
(5 mins)
[SLIDE: What is the World Wide Web?]

So, now we know what the internet is. Then, what is the World Wide Web - or web, for short?

The Web is a way of accessing and visualizing information on the internet. The Web is just a small part of the internet. The part of the internet that connects webservers, the computers that serve up websites. To connect to this part of the internet, computers use HTTP, Hypertext Transfer Protocol. HTTP is the language that the Web speaks. When I ask for information via the web, an HTTP request is sent to the internet, and a website is returned.

So, for example, when you want to get to Facebook, an HTTP request for the website called facebook.com is sent out on the internet. But HTTP means that the Web responds to the request. A website is returned, not email, not ftp, not rtc.” [point out and click to show “http” in the example, before “www.facebook.com”].

[SLIDE: What is the World Wide Web (2)?]

To review, the internet is the entire Network of Networks that forms an Information Infrastructure. While the Web is a small piece of the internet that uses HTTP to access information. [toggle back and forth several times repeating “internet” or “the Web” with each image.]

So, we know that requests to the Web use the language of HTTP. When I ask for Facebook.com, the Web finds the server that has the website and returns it to my computer. But, I need a way to see the website, and, for most of us, we see websites through a Web browser.”

“Web browsers are a relatively new invention. The internet was built in the 1960s, and Web browsers (and the World Wide Web) were created in the early 1990s.”

[SLIDE: The Web Before...CLI]
Before Web browsers, the internet had to be accessed through the Command Line Interface. Command Line Interfaces (or CLI, for short) were ugly and plain. Hardly anyone in the general public used the internet then, and hardly anyone would use it now if not for browsers.

Prompt: This is Facebook using the Command Line Interface. Would you use the internet if this is what it looked like?

[SLIDE: The Web After…Web Browsers]

This is Facebook in a Web browser. Web browsers make the internet come alive for the general public. The introduction of Web browsers ushered in an explosion of interest in the internet in the general public.

[SLIDE: The Web Before…YouTube]

This is YouTube in the Command Line Interface.

[SLIDE: The Web After…YouTube]

This is YouTube in a browser.

Web browsers (5 mins)

[SLIDE: Web Browsers]

Web browsers allow you to do just that: browse the internet for websites. There are many browsers to choose from, and these are just some of the more common browsers in use:

- internet Explorer (Microsoft)
- Safari (Apple)
- Chrome (Google)
- Firefox (Mozilla)
- Opera (Opera)

So, web browsers provide a visually-engaging and user-friendly way to browse information via websites on the internet.

Which browsers are you familiar with?

How many web browsers do you have on your mobile device? Which do you use, and why?

BREAK (5 mins)

[Slide: Break]

Activity 2.1: Identifying Browser Elements & Navigation (20 mins)

[Slide: Activity 2.1]

Demo (5 mins):
Basic elements and navigation of a desktop browser. Point out elements and demonstrate functionality.

Group Work (10 mins):
1. Have groups find the same elements in various browsers on the various devices they have.
Discussion (5 mins):

- What did you notice across browsers?
- What did you notice across browsers on different platforms?

Activity 2.2: Search the Web Across Platforms
(20 mins)

[Slide: Activity 2.2]

Demo (5 mins): How to search the Web

- Search engine (example: find Wikipedia through Google Search)
- Website URL (example: navigate directly to Wikipedia by typing in the URL)

Group Work (10 mins):

1. Have groups find / open Facebook in various browsers and apps on the various devices they have.
2. Have them note their observations. Observations should include that Facebook looks different and has full or limited functionality across different browsers (desktop vs. mobile) and in the apps.

Discussion (5 mins):

- What did you notice across browsers on different platforms?
- What advantages / disadvantages did you find on the different platforms?

Notes:

Some benefits for desktop browsers:

- Ability to see code
- Debug
- Status on hover
- Generally full features available only in desktop browser
- Windows can cascade (can see windows side by side or stacked)
- Saving tabbed bookmarks at one time
- Opening tabbed bookmarks at once

Some benefits for mobile browsers:

- Compact layout / flow for small form factor (desktop versions don't look right in mobile platforms)
- Sharing links easier than on desktop (built in as a part of browser functionality)

Activity 2.3: Hyperlinks and Hypertext
(20 mins)

[Slide: Activity 2.3]

Demo (5 mins): Hypertext and Hyperlinks

- Websites and browsers are fun, but Hyperlinking is what makes the Web a powerful system.
Group Work (10 mins):
   1. Have groups exchange mobile contact information
   2. Open Hyperlinks and Hypertext
   3. Share Hyperlinked information with group members using chat, SMS, etc., via Facebook.
   4. Receive Hyperlinked information from group members

Discussion (5 mins):
   ➢ What are the benefits and issues that you can see with Hyperlinks and Hypertext?

Notes:
A critical concept to note is that Hypertext masks Hyperlinks. Hypertext can say anything and be different from the Hyperlink. An issue is: those who are unaware of how to see Hyperlinks in Hypertext may inadvertently be taken to an unexpected website or encounter an unexpected condition. For example, I could use “Go to Facebook” or even “http://www.facebook.com” as Hypertext. But underneath that Hypertext, I may have the Hyperlink actually go to http://www.wikipedia.com. This is the basis for many email scams, so emphasize that participants should always check the hyperlink before clicking on them to determine if they are valid.

Activity 2.4: Tabs and Bookmarks (20 mins)
[Slide: Activity 2.4]

Demo (5 mins): Tabs and bookmarks using desktop browsers
   • Single
   • Tabbed

Group Work (10 mins):
   1. Have groups open 3-5 tabs
   2. Save the bookmarks in browsers on devices
   3. Close browsers completely
   4. Reopen your browser and open the saved bookmarks

Discussion (5 mins):
   ➢ What differences do you note from the demo of the desktop browser?
   ➢ What advantages and disadvantages do you note across the various platforms?
   ➢ When might you use particular browsers and devices; Why?

Wrap Up
[Slide: Review]
   ➢ This concludes module 2. You now know the distinction between the internet and the World Wide Web, the advantages and disadvantages of searching across different platforms, and how to find and share information you find on the internet. For the remainder of the modules in this curriculum, we will build upon the foundation laid in modules 1 and 2 to develop mobile information literacy skills.
   Take any questions or comments if any.
[Slide: End of Module 2]