**MOBILE INFORMATION LITERACY CURRICULUM**

Sheryl Day

April 2015

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**ABOUT THE AUTHOR**

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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*](http://tascha.uw.edu/projects/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](http://ipts.jrc.ec.europa.eu/publications/pub.cfm?id=6359), [SCONUL](http://www.sconul.ac.uk/sites/default/files/documents/21_13.pdf), and [Empowering 8](http://sllim.sljol.info/articles/abstract/10.4038/sllim.v1i1.430/). 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 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](https://creativecommons.org/licenses/by-sa/3.0/us/), 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>, and/or participate on our Facebook page <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

# Module 1: Introduction to Mobile ICTs

Estimated total time: 1 hour, 20 minutes

**Introduction to Mobile Information and Communication Technologies (ICTs)**

This module introduces participants to ICTs with a focus on mobile devices. Conceptual overview covers the evolution of ICT devices, OS platforms, basic functionality, and communication. Hands-on exercises cover basic operation of tablets and mobile phones, basic applications, and basic communication methods. Group work covers discussing general observations and perspectives, benefits and limitations of particular ICT devices and communication methods, and considering scenarios and relevance of each.

**Prerequisites:**

None

**Topics covered:**

* ICT basics
* Mobile ICT basics
* Mobile phone operation
* Affordances of mobile ICTs

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

* What are ICTs?
* Why are ICTs important?
* How is information accessed on mobile ICT devices?
* How do I send and receive information on my ICT device?
* How do I protect information on my ICT device?

**How long does this module take?**

1 hour, 20 minutes (80 minutes)

## **Outline**

1. Overview 5 mins
2. Defining ICTs 3 mins
3. Info Discussion 7 mins
4. Break 5 mins
5. Activities 60 mins

* Activity 1.1: Making a Wi-Fi Connection
* Activity 1.2: Securing Devices
* Activity 1.3: Downloading and Assessing Apps
* Activity 1.4: Basic Messaging and File Sharing

## **Assumptions**

* All participants have mobile devices such as smartphones or tablets.
* Participants have basic knowledge of how to operate their mobile devices.
* Wi-Fi is available at the facility for participants to access.
* Welcome and introductions have already been done prior to this module.
* Participants have limited knowledge of ICTs.

## **Prepare ahead**

Be sure to familiarize yourself with basic ICT features of mobile devices across the most common platforms used by your participants. Review the activities and ensure that you set up any necessary accounts and online spaces ahead of time.

## **Background information**

ICT stands for “Information and Communications Technology.” While many immediately think of mobile phones and tablets when asked to identify ICT devices, ICTs have a much longer history and include such devices as television, radio, computers, and telephones. ICT refers both to the study of as well as the devices and processes used for communications. This workshop, however, will focus on mobile devices since they are more prevalent in Myanmar amongst the general population compared to computers and other devices.

## **Overview**

**(5 mins)**

[Slide: Overview]

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

* *Hello, everyone. Welcome to the Myanmar Mobile Information Training Workshop. My name is […]. This is Module 1: Intro to Mobile ICTs.*
* *In this Module, we will get an introduction to ICTs, briefly cover information and security, and do some hands-on activities to get familiar with using ICTs. As trainers, it will be important to be able to take your trainees through the process of working through their devices and understanding information without assuming any prior knowledge.*
* *By the end of this Module, you will have a basic understanding of ICTs that we will build on for the remaining Modules of this Mobile Information Literacy Module.*
* *The best way to learn mobile 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. You are encouraged to get the maximum benefit out of this workshop by experimenting, making mistakes so that you can learn from them, and asking lots of questions. As we progress, if something is unclear, please don’t hesitate to ask for clarification.*

Encourage participants to be interactive and engage from the beginning by prompting them with:

* *Who can tell me what “ICT” stands for?*

Call on any volunteers to answer. Depending on the response, you may prompt further with: *Anyone else?* When you receive a correct answer, or if you receive incorrect or no answers, state: *ICT stands for “Information and Communications Technology.”*

* *Who here uses or has used ICTs?*

You may wish to register the show of hands total for later reference.

* Call upon a few to answer, prompting them with: *What did you use it for?* Acknowledge their responses and repeat for the group. You may decide to prompt further with: *What else did you use ICTs for?* Depending on the response, it may help to add your personal experiences or other examples of using ICTs. Note the responses and reiterate a general summary: *So, it appears that most are using ICTs for […], some for […], and others for […]*. If there was a low number of positive responses to the earlier question on who uses ICTs, you may wish to ask the question again at this point to emphasize that, indeed, all participants use or have used some form of ICT.

## **Defining ICTs**

**(3 mins)**

**[Slide: What are ICTs?]**

**Reiterate that ICTs = Information and Communications Technologies. Break down the acronym into its separate parts, and say each as you write or project for the participants to see:**

1. **I**nformation
2. **C**ommunications
3. **T**echnologies

* ***Information is the representation of what we want to convey***
* ***Communications is the sending or receiving of that information***
* ***Technologies are the means of managing and enabling that information and communication***
* ***Information and Communications Technologies, or ICTs, are the devices and processes for creating, storing, retrieving, manipulating, sending, and receiving information.***

**Emphasize that “Information” is very broadly defined. Traditional definitions of information usually meant print, textual, or verbal form, but information is much more than these. Prompt participants to reflect on this:**

* ***Are photos information? Bodies? Buildings? Songs? Emoticons? The winds?***

**There are no incorrect answers. Information is everywhere, and all of these can be represented and managed by ICTs in some way. You may wish to refer to various images of ICTs, point them out in the facility, or name a few.**

## **Information Discussion**

**(7 mins)**

**[Slide: What Counts as Information?]**

**ICTs include many devices and processes, but with the increasing prevalence of mobile phones amongst the general population over other types of ICTs, these have become a major focus for researchers, businesses, educators, and more.**

**Poll the participants for their use of ICTs:**

* ***How many people have a computer at home? At work? (If relevant: At school?)***
* ***How many people use tablets at home? At work? (If relevant: At school?)***
* ***How many people have a mobile phone? Where do you use it?***

**Summarize your observations for the group:**

* ***So, [x] people have computers at home, [y] use computers at work; [x] people have tablets at home, [y] use tablets at work; and [z] have mobile phones.***

**Include school or other examples as necessary depending on your audience. You may wish to represent the numbers as percentages of the total number of participants; ideally, you should see that everyone uses a phone, more so than computers and tablets, and that this use is ubiquitous.**

* ***Given the prevalence, and this is only increasing, you can see why businesses, governments, educators, and so on are interested in focusing on ICTs, mobile phones in particular. But it’s not the devices themselves that are of primary interest.***

**Get a sense of how aware participants are of the information on their phone:**

* ***How many people have information on their mobile devices?***
* ***What types of information are on your device? What do you use this information for?***
* ***What do you consider valuable information? Why?***
* ***How many people have valuable information on their phones?***

**Begin to establish a critical perspective on information that will be built on later:**

* ***What might someone do with the information on your device?***
* ***We now live in an information economy. More people have greater access to more information than ever before. ICTs make this possible. On the one hand, this is a positive benefit than can improve lives, and on the other, we must adjust our thinking of what this access to information entails. In an information economy, information is a valuable commodity much like material possessions and, similarly, needs to be protected from theft, misuse, and unauthorized access. Big Data tells us that any and all information, no matter how seemingly insignificant, can be combined and analyzed in ways that most people never intended or imagined. [Provide examples, such as: retail establishments would like to know what kind of people would buy their products and why, where their customers come from, and what influences their purchasing decisions. Any information about you, as their customer, on your habits, preferences, sensibilities will allow them to build profiles of other potential customers. This may be a positive or negative depending on your views of privacy. If you like retail establishments making suggestions for your future purchases based on a profile they’ve built of your habits and preferences, then this is a benefit. But consider: if retail establishments would pay enormous amounts of money to collect all kinds of data on you, can you think of what other entities might be interested in doing the same for their purposes without your knowledge or consent?]***
* ***Once your information is collected, where do you think it goes? What happens to it? What are some reasons why this might be important to consider? [If you receive few responses, prompt with: would you want just anyone to have access to information on your whereabouts? What about where you shop, what you buy, who you call, where you live, who your family and friends are, where you work, what you read, etc.? Why might this be problematic?]***
* ***So, access to information on the internet offers many positive benefits, but we must also be vigilant in protecting against unauthorized and negative uses of our information. This means becoming more literate about digital information.***

## Activity 1.1: Making a Wi-Fi Connection

(5-20 mins)

[Slide: Activity 1.1]

Have participants connect to the designated facility Wi-Fi. Emphasize that getting connected to the network is an important first step to continuing on with the remainder of the workshop. Access to the facility Wi-Fi will allow participants to practice downloading and installing apps, a skill that they will need to be familiar with for Module 2. Note: if participants are already sitting in groups, the time for this activity will be lower than if they have to take time to arrange into groups first. Also, while trainers may already be connected themselves, this is an important exercise for them to be able to do with others and on other types of phones and devices.

* *Except for the most basic cellular phones, most mobile devices such as smartphones and tablets can connect to the internet using Wi-Fi. Wi-Fi offers many advantages over cellular network connections:*

(Provide brief relevant examples for each item.)

* + *Cost – Wi-Fi is often free or very low cost; there are no roaming charges for Wi-Fi. (example: I can download and watch videos all day long using Wi-Fi at no charge; over cellular, I would easily exceed my data limit.)*
  + *Coverage – Wi-Fi is widely available; many homes, businesses, and other locations offer Wi-Fi. (example: This [type of facility] offers free Wi-Fi; […] offers free Wi-Fi; most airports, coffee shops, and retail businesses offer free Wi-Fi; etc.)*
  + *Speed – Wi-Fi has significantly faster speeds allowing for more data transfer over less time*
  + *Quality – Calls are often clearer over Wi-Fi than cellular (example: [provide personal exp.])*
  + *Apps – Many apps require Wi-Fi and can’t be used over cellular networks (example: Skype)*
  + *Security – Wi-Fi offers security control options (example: Wi-Fi administrators can limit who has access to their connection, protecting those currently on the network from unknown and malicious users; they can also control what gets accessed; etc.)*

1. Have participants form into small groups and work together to get connected to the Wi-Fi.
2. Provide the participants with the information necessary to log into the Wi-Fi
3. Encourage them to help others get connected on their devices.
4. Check in with each group to mark their progress and troubleshoot any issues.

## Activity 1.2: Securing Devices

(10-20 mins)

[Slide: Activity 1.2]

* *Now that we know that your information is valuable, it is important to understand how to protect your information from unauthorized access and use. The most basic way to do this is to secure your devices. All devices have some security options. How many people use some kind of protection mechanism to secure information on their devices? What do you do? [Provide other options depending on devices, such as phone location settings.]*

1. Have participants work in groups to set basic security options on their devices, such as setting a device lock that requires a code or other method such as fingerprint to unlock.
2. Check in with each group to mark their progress and troubleshoot any issues.
3. Time permitting, ask participants about types of security options they discovered on their devices, and have them discuss the benefits and disadvantages of each.
4. Close by emphasizing an important information security method that many overlook: destroying information on a device before discarding the device or giving it away.

BREAK

(5 mins)

[Slide: Break]

## Activity 1.3: Downloading and Assessing Apps

(20 mins)

[Slide: Activity 1.3]

Applications, or apps for short, are the programs that make mobile devices so powerful. In order to progress through the remainder of this module, participants will need to: 1) know how to download apps and install apps, and 2) understand basic app management.

* *What is an app?*
* *What apps do you have on your device?*
* *What do you use them for?*

Note the totals and summarize the app categories and uses for the group. For example, *[x] of you use Facebook for staying in touch or learning about current events; [y] use YouTube to watch videos; [z] use WhatsApp for messaging; etc.*

Depending on the answers, lead into the activity by noting that the internet offers unprecedented access to information and communication, and ICTs via apps on mobile devices allow users to engage in this space. Emphasize the importance of understanding how to download and manage apps.

1. In groups, have participants find and compare their device method for downloading apps.
2. Instruct participants to download an app that you have selected. Choose one that participants do not already have, that is free, is from a trusted company, and is small enough for everyone to download at the same time. Some examples, though trainers will need to replace with apps that will work in Myanmar and that they have tested ahead of the Module: CamCard, OneBusAway, Zillow.
3. Check in with each group to mark their progress and troubleshoot any issues.

At present, there are over 1 million Android and Apple apps available for download. With so many apps to choose from, it can be difficult to assess the credibility and safety of apps. Emphasize the following items to be aware of in assessing apps:

1. Number of downloads – some apps are imitations or have very persuasive descriptions. For popular apps, participants should see a relatively large number of downloads compared to lookalikes.
2. Company or Creator – look for familiar names of companies or app creators that have established reputations for quality products and services.
3. Reviews – browse the lowest-rated reviews to learn about issues that users have noted.

Now that participants have downloaded the apps onto their devices, it is important that they understand how to access the settings on the app. At this point, they will not need to modify the settings, just understand how to find the settings of apps.

1. Have the participants work with their groups to find and identify the settings on their devices associated with the app they just downloaded.

* *What are some options available in settings? What do they do?*
* *Which settings options do you think are important for protecting your information? Why?*

1. Check in with each group to mark their progress and troubleshoot any issues.

Simply navigating away or closing an app window does not shut down an app. Many users erroneously believe that apps are closed down because they don’t see them. If apps are not closed down, they can continue to run in the background. In addition, running apps deplete battery life.

1. Have participants work in their groups to learn how to properly close down apps on their devices as well as on other devices.
2. Check in with each group to mark their progress and troubleshoot any issues.

Finally, participants should understand how to remove apps they no longer want on their devices:

1. Have participants work in their groups to learn how to delete apps on their devices as well as on other devices.
2. Check in with each group to mark their progress and troubleshoot any issues.

## Activity 1.4: Basic Messaging and File Sharing – Email, SMS/MMS, listserv, DropBox, Facebook or other Social Media Application

(10-20 mins per application)

[Slide: Activity 1.4]

Depending on the level of experience and goals for the participants, select one, several, or all of these file sharing and communication applications to practice connecting and exchanging information. Note, for Dropbox and listerv applications, trainers will need to create these spaces ahead of time before they can add participants. One method to practice multiple applications in the same exercise is to connect these various methods. For example, have everyone send you an email. Then use their email addresses to add them to a DropBox space that you’ve already created ahead of this Module. You can also use the same email addresses to add them to a listserv; or you can instruct participants to request to be added by directing them to the listserv webpage. You can then use the listserv to send a group message asking everyone to send you an SMS message so that you will have their contact info. There are a variety of ways to combine taking participants through these methods. Choose what works best for your given group of participants.

SMS (Short Message Service) / MMS (Multimedia Messaging Service):

1. Provide participants with your contact information.
2. Have them send you an SMS / MMS message.
3. Respond to their messages.
4. Have group members exchange contact info and send the group an SMS / MMS message.

* Note: some participants may need to adjust settings on their devices to handle MMS, so trainers should be prepared to assist participants with these settings.

Email:

1. Provide participants with your email information.
2. Have them send you an email message.
3. Respond to their messages.
4. Have group members exchange contact info and send each other a group email message.

* Note: for participants without email addresses, you will need to guide them through setting one up. One recommendation: have them download or use their Gmail app.

Listserv:

1. Provide participants with the listserv information.
2. Have them sign up on the listserv webpage, or you may opt to add them yourself.
3. Send a message to the listserv.
4. Have group members respond to the listserv.

DropBox:

1. Provide permissions on a shared DropBox for participants and use the DropBox option to send the info to participants.
2. Have them navigate to the DropBox space.
3. Demonstrate adding a file to the DropBox.
4. Instruct participants to upload a file of their own to the DropBox.

More advanced users:

1. Create a DropBox space for groups, and instruct groups to upload files to the specific directories that you created for them.
2. Instruct participants to create their own DropBox spaces and share one with you.
3. Instruct participants to create and share a DropBox space with their group.
4. Create and send a link to a DropBox file to participants.
5. Instruct participants to send you and their group members a link to a file in DropBox.

Facebook / Social Media:

1. Provide participants with your personal or group Facebook information.
2. Have them send a message using Facebook.
3. Time permitting, you can also choose to cover various options for sending messages on Facebook, such as posting vs. messaging, security and privacy options for messages, etc.

## Wrap up

[Slide: Review]

* *That concludes module 1. You now have learned what ICTs are, why understanding ICTs and mobile information literacy are important, and how to manage your mobile ICT device for accessing information on the internet. In module 2, we shift our attention to the space of the internet.*

Take any questions or comments if any, then take a break.

[Slide: End of Module 1]

# Module 2: A Mobile Lens on the Internet

Estimated total time: 1 hour, 20 minutes

**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)

## **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 “****Inter****national* ***Net****work”) 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.]

[End toggle on Web 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]

# Module 3: Basic Web Searching via Mobile Devices

Estimated total time: 3 hours

**Basic Web Searching via Mobile Devices**

In this module, we will cover different types of websites, how to use search engines to search the web, and compare finding information using search engines vs. Facebook.

**Prerequisites:**

* Module 1: Introduction to Mobile Information & Communication Technologies (ICTs)
* Module 2: A Mobile Lens on the Internet

**Topics covered:**

* Web browsers
* Basic web search

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

* What are some different types of websites?
* How do I use search engines to search the Web?
* How do search engines compare to Facebook?

**How long does this module take?**

3 hours (180 minutes)

## **Outline**

1. Overview <1 min
2. Digital Information Literacy 10 mins
3. Websites and Search Engines 5 mins
4. Activities 150 mins

* Activity 3.1: Web Browser Apps
* Activity 3.2: Web Search Operators

1. Break 15 mins
2. Activities 45-110 mins

* Activity 3.3: Search Engines vs. FB
* Activity 3.4: Advanced Search

## **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 2: A Mobile Lens on the Internet

## **Prepare ahead**

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

## **Background information**

One of the most effective ways to learn about digital information literacy and to acquire new skills on the Internet is to apply knowledge and techniques to real-world applications. This module approaches digital information literacy through repetition of practical application to reinforce concepts. The exercises provided are examples. Trainers should use appropriate examples as necessary according to the needs and experience of their participants.

## **Overview**

**(<1 min)**

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

* *This is Module 3: Basic Web Searching via Mobile Devices. In this Module, we will cover different types of websites, how to use search engines to search the Web, and compare finding information using search engines vs. Facebook.*
* *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.*

## **Digital Information Literacy**

**(10 mins)**

[Slide: Digital Information Literacy]

Set up the importance of digital information literacy so that participants have these concepts in mind as they go through the remaining activities:

* *The prevalence of ICTs means that more people can and will use the Internet as their primary resource for finding and sharing information, whether in a personal or professional capacity. Similar to oral and print information, however, Internet users should be aware of how the Internet works and should be critical of context and the sources of their information.*
* *In oral scenarios, for example, we understand that just because someone says something, that doesn’t mean that the information is true or correct.* [Provide a local example demonstrating how simply saying something does not make the information true such as, “the sky is falling.”].
* *In print scenarios, just because something is printed in a book or newspaper that also doesn’t necessarily mean the information is true or correct.* [Provide a local example of a printed book or newspaper that demonstrates incorrect information, such as history books claiming the earth is flat]*.*

[Slide: Giant Squid]

This image went viral last year depicting a squid that had supposedly mutated into gigantic proportions as a result of radiation from Fukushima. The original story appeared on a [website pretending to be reporting news](http://www.lightlybraisedturnip.com/giant-squid-in-california/). Digging further into the website reveals the following disclaimer: “ASSUME NO STORIES ARE TRUE.”

* *In visual scenarios, just because something appears in a photograph, drawing, or video, that doesn’t mean that the information is necessarily true or correct either.*

[Provide local examples, noting how images can be altered or misleading].

* *In all of these cases, context and source are important considerations in determining the intent and validity of the information.*

[Slide: Misinformation vs. Disinformation]

* *Information that is incorrect can be classified as “misinformation.” Information that is intended to be deceptive can be classified as “disinformation.” “Intention” is the key word. Misinformation is the result of poor information or lack of information, while disinformation is the result of an ulterior motive towards contradicting true or correct information.*
* *Can you think of cases that you know of that are examples of misinformation?*
* *What about disinformation?*

Take answers for both questions, and engage in brief discussions on what makes them misinformation vs. disinformation.

* *Can something be both misinformation and disinformation at the same time?*

[Slide: News Satire (video)]

* *Does anyone know what “satire” means? Around the world, satire is prevalent, but many Facebook users appear to be unaware of the distinction between satirical and authentic news sources. Facebook acknowledged this issue by recently proposing to create a “satire” tag. Currently, this tag is in testing.* [Play video] Many websites are satirical news sites. They publish stories that appear to be authentic news, but are meant to be jokes, or satires. Oftentimes, the average Internet user cannot distinguish between satirical news and authentic news reports. This can be seen in Facebook posts of such stories and the strong reactions in Facebook feeds to these posts. The Onion is an example of a satirical news website in the U.S.

[Are there examples of local satirical websites that participants can discuss?]

## **Websites and Search Engines**

**(5 mins)**

[Slide: Websites and Search Engines]

Although there are different types of websites, many of these categories overlap:

* *Remember from Module 2 that websites are simply a way to visualize information that is on the Internet. There are many different types of websites, such as social media websites like Facebook, news websites such as* [use local example]*, web logs or “blogs” for short, reference websites such as merriam-webster.com, collaborative knowledge-based websites such as Wikipedia, and more.*
* *What other types of websites can you think of?*
* *One particular type of website is especially useful for simply searching the Internet for information: search engine websites.*
* *Search engines are code, or algorithms, that take your requests for information and comb through databases of information and websites that have been indexed to give you a list of websites and information resources that might be relevant. Can you name any search engines you might have used?*

[Take answers from several participants and then list some common search engines.]

* *It’s important to realize that search engines do not index and have not indexed everything on the Internet. Google has indexed only a minute fraction of the Deep Web, the information that is hidden from general search engines. Facebook is an even tinier fraction of that information space. So, by only using Facebook as a primary source for information, we limit our ability to search the vast amounts of information on the Internet. In addition, not all search engines index information in the same way. For example, lawyers would use special search engines, such as LexisNexis, that provide legal information in a way that is useful for them. Physicians would use other search engines that provide medical information in a way that is useful for them.*

## Activities

(150 mins)

## Activity 3.1: Web Browser Apps

(10-20 mins)

[Slide: Activity 3.1]

Working in groups, instruct participants to download different browsers. Most mobile devices already come standard with a browser such as Google Chrome for Android devices; however, it is important for participants to understand that browsers are continually changing. New browsers with improved functionality are created, existing browsers are upgraded, and others are no longer supported over time and become obsolete. Have participants download browsers that they currently do not have on their devices:

* *In module 2, we learned that there are many different web browsers. Most of your devices already come with a standard browser, but it’s important to understand that browsers are continuously changing. What browser(s) do you have on your devices?*
* *Download 1 or 2 other browsers on your device. If you have Google Chrome, for example, you may want to download Mozilla Firefox, Opera, or Dolphin. Remember to look for indicators that tell you if the app you are downloading is the right one, i.e. large number of downloads, credible company, large number of positive ratings, etc.*
* *Once you’ve downloaded your new browser apps, take a look at the settings for each one, and see what search engines they are using. Are there a variety of search engines that you can choose from? Which ones? See if you change the search engine to Google. Were you able to set this in all of your browsers?*

Note: some browser apps allow you to use the Google search engine, but don’t offer a way to set that as the default search engine. This exercise should highlight how users can still use Google search in their browsers.

## **Activity 3.2: Web Search Operators**

**(30-80 mins)**

[Slide: Activity 3.2]

**While using search operators is important for finding information on the Web, search results are also affected by how content producers name, tag, and manage their content. A video will be difficult to find if the content producer uses a title that is obscure or unrelated to the actual content or how others might search for it. For example, a video about a local soccer match entitled “fun times” is not a good descriptor; however, there are other ways to tag content to provide pertinent details. A better title would be something like “fun times – local soccer match, Myanmar Stadium, May 5, 2015.”**

* *Search engines simplify what users have to do in order to find information on the Internet, but there are useful techniques that can help users refine their searches to find what they are really looking for. Let’s go through some of the most useful techniques for searching the web using search engines.*

**For the sake of ensuring participants can practice and be successful without being distracted by technical issues, keep things simple, and be sure that all participants are using the Google search engine in their different browsers. Once participants understand search basics, they can easily transfer their skills to other search engines later.**

**Note that in Google search, the Boolean operators of AND and NOT still exist, but are not generally used explicitly in this form. AND is implied.**

**For each demo below, use multiple tabs to run and compare searches so that you can easily switch between tabs to demonstrate how the results compare.**

Demo (5-15 mins each):

1. **“”**

* *Quotation marks are used to find exact matches to the text within the quotation marks.*

[Ex: **“zaw aung”** finds instances that match exactly “zaw” before “aung” however, without the quotes, typing only **zaw aung** will also bring up pages with “aung” before “zaw”]

Have participants practice their own searches using quotation marks. Remind them to use multiple tabs so that they can see how their results differ.

1. **\***

* *The wildcard symbol is used to find unknown text where the asterisk is positioned.*

[Ex: **zaw \* aung** finds instances of “zaw” + “sometext” + “aung”]

Have participants practice their own searches using wildcards. Remind them to use multiple tabs so that they can see how their results differ.

1. **-**

* *the dash is used to exclude text that follows it.*

[Ex: **thant** pulls up all instances with “thant” but **thant -U** will exclude instances of “U Thant”]

Have participants try their own searches using the dash. Remind them to use multiple tabs so that they can see how their results differ.

1. **OR**

* **OR***, in all capital letters, is used to include alternative text to search.*

[Ex: **basket OR ball** pulls up instances of “basket” and separate instances of “ball” but not instances where the words “basket” and “ball” occur together]

* *What happens when you don’t use the* **OR** *and type in only* **basket ball**?

Have participants practice their own searches using **OR**.

* *What happens if you forget to capitalize* **OR** and type **or** instead*?*

Note, participants may not see any difference. Some search engines require capital letters for Boolean operators of AND, OR, NOT, etc., but it’s good practice to use all caps to prevent any issues. Also note that Google search implies AND between words, and uses the dash in place of NOT.

1. **site**

* **site** *is used to search only within a specified site. Note, that there is no space between the operator, colon, and site to search.*

This is particularly useful if, for example, you consider certain sites to be credible sources for what you are looking for and only want to search within those sites. [Ex: **lahpet** pulls up instances any and all instances of “lahpet” but **lahpet site:Wikipedia.org** pulls up only those instances found only in Wikipedia]

* *Try typing in “lahpet” in Google search and see what comes up. Now try it with the* **site** *option.*
* *What happens when you combine the OR option above to add other sites?*

[Ex: **lahpet site:Wikipedia.org OR site:youtube.com**?]

Have participants practice searches using **site** alone and in combination with **OR**.

* *Is there a limit to the number of sites you might include?*
* *What advantages do you see in using the* **site** *option?*
* *Are there any disadvantages you can think of? If so, what are they, and when might these occur?*

1. **inurl**

* **inurl** *is used to search for text only within urls . A URL is what you see in the address bar when visiting a website. For example, “http://www.facebook.com” points to the location of the Facebook website. URLs can be longer, such as https://www.facebook.com/7daynews that points to the Facebook page for 7 Day News.*

URL stands for “Uniform Resource Locator” and refers to the location for a resource such as a website.

* *What does* **inurl:7daynews** *bring up?*
* *When might using this option be useful?*

Have participants practice searches using **inurl**.

* *Can you search for all Facebook pages that contain “Myanmar” in the URL? How is this kind of search different from just typing in “Myanmar” in Facebook search?*

BREAK

(15 mins)

## **Activity 3.3: Search Engines vs. Facebook**

**(30-60 mins)**

[Slide: Activity 3.3]

It will be important for participants to go through several examples to practice using and reinforce their new knowledge of search operators. Below is one example of how to do this. Trainers should prepare 2-3 more examples that are relevant to the interests of their participants.

* *Now that we have learned some basics of using search engines, and given that most of you are very familiar with Facebook, let’s compare the two. Do the following searches in Google search and Facebook:*

1. *Let’s say that you want to find sports websites in Myanmar. How would you do that?*
2. ***How can you limit your search results to getting only government websites in Myanmar?***
3. ***How can you refine your results to exclude government websites but include websites in Myanmar?***
4. ***How might you expand your search to include all Myanmar websites, YouTube, and all higher education websites?***

**Note: Top level domains are reserved for countries or special cases. The higher education top level domain is .edu; and Myanmar-based websites, use the top level country domain of .mm. If a Myanmar entity has a website that is hosted outside of Myanmar, then the website will have the Country Code Top Level Domain (ccTLD) of wherever it is being hosted. Moduleed States websites have a ccTLD of .us appended to domain names, but it is conventionally left off and assumed.**

* **So, the above search #2, for example, you might use: sports site:.mm**
* **To get Myanmar government-only websites, you would use site:.gov.mm**
* **To exclude Myanmar government-only websites, you would use site:.mm -.gov**
* **#4 could look something like:**

**Myanmar sports site:.mm OR site:youtube.com OR site:.edu**

* *What did you notice about your search results in Facebook?*
* *What did you notice about your search results in Google search?*
* *When might it be more advantageous to use Facebook to find information?*
* *When might it be more advantageous to use Google search to find information?*

## Activity 3.4: Advanced Search

(15-50 mins)

[Slide: Activity 3.4]

Time permitting, and if you have a more advanced group, encourage participants to experiment with additional search operators in the [online Google Guide](http://www.googleguide.com/advanced_operators_reference.html).

You also may wish to compare with [Google’s Reference: Advanced Operators for Web Search](https://sites.google.com/site/gwebsearcheducation/advanced-operators).

* *What does this search string do?* **allintitle:chinlone myanmar site:facebook.com**
* *How does this method of searching Facebook compare with searching within Facebook?*
* *Can you think of ways in which using search operators in this manner might be useful?*

## Wrap Up

[Slide: Review]

* *This concludes module 3. You know understand that there are different types of websites, the basics of searching for online information, and how using a browser search engine compares to searching in a website such as Facebook.*

Take any questions or comments if any.

# Module 4: Working Online and Using Information via Mobile Devices

Estimated total time: 3 hours

**Working Online and Using Information via Mobile Devices**

In this module, we will cover privacy and security measures, online etiquette, referencing online sources, and working in collaborative online environments.

**Prerequisites:**

* Module 1: Introduction to Mobile Information & Communication Technologies (ICTs)
* Module 2: A Mobile Lens on the Internet
* Module 3: Basic Web Searching via Mobile Devices

**Topics covered:**

* Privacy and security measures
* Online etiquette
* Referencing online sources
* Working in collaborative online environments

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

* How do I protect my privacy online?
* What are some rules and guidelines for online behavior?
* How do I use and reference online sources?
* How do I work online with others?

**How long does this module take?**

3 hours (180 minutes)

## **Outline**

1. Overview <1 min
2. Privacy and Security 5 mins
3. Netiquette 5 mins
4. Credit, Credibility, and Copyright 4 mins
5. The Cloud 1 min
6. Activities 150 mins

* Activity 4.1: Basic Protection Measures
* Activity 4.2: Using Online Content
* Activity 4.3: Facebook Groups

1. Break 15 mins
2. Activity 4.4: Intro to Google Docs 50-75 mins

## **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 3: Basic Web Searching via Mobile Devices.

## **Prepare ahead**

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

## **Background information**

Understanding how to work with online information and collaborating with others online are essential to developing digital information literacy. In the online space, it is important to build awareness and take precautions against security vulnerabilities just as one would in a physical space.

## **Overview**

**(<1 min)**

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

* *This is Module 4: Working Online and Using Information via Mobile Devices. In this module, we will cover privacy and security measures, online etiquette, referencing online sources, and working in collaborative online environments.*
* *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.*

## Privacy and Security

(5 mins)

[Slide: Privacy, Why Bother?]

* *Similar to the physical environment, where we must take certain precautions to ensure privacy and security for ourselves and others, the online environment has its own particular set of precautions that are important to be aware of. Why would we want to protect our privacy?* [Take a few answers, and provide local examples.]

[Slide: Privacy and Security]

* *As we learned earlier, we can adjust the settings in apps that we download and use on our mobile devices to limit the data that can be accessed and shared about us. Do you remember what some of those settings were?* [Take a few answers, should include: location, access to contacts, camera, microphone, etc.]

If you receive little or no answers covering browsers, emphasize the following security measures to safeguarding information when using browsers:

* Do not track – prevents third parties from monitoring the websites that you visit.
* Private browsing – prevents browsers from saving websites that you visit in the browser search history. Private browsing does not mean your browsing is invisible to others. It just that a record is not made in your browsing history.
* Clearing browser history and cookies – allows users to clear previously saved browsing history and the cookies that identify browser users.

[Slide: Facebook Privacy Policy]

* *What are some security measures we can take to protect privacy when using social media like Facebook?*

[Take a few answers and discuss.] Because Facebook is so prevalent in Myanmar and is often the first, if not only, exposure to the Internet for many, focusing on privacy and security within Facebook is essential to understanding these concepts.

[Slide: Who is Responsible for Privacy and Security?]

* *Who is responsible for ensuring your privacy and the security of your information?*

[Take a few answers.]

* *Since its inception, Facebook has changed and updated its privacy policies and security measures. Companies that provide services or products must provide mechanisms to protect privacy and security, but individuals must stay aware of these mechanisms and actively practice privacy and security.*

Emphasize that with rapid changes in ICTs, that how security works and privacy are protected will continuously change, but the need to protect privacy and have security measures is constant and is the main concept to remember. Encourage participants to stay vigilant about always ensuring that they take necessary precautions to protect their privacy and stay aware of available security measures. Discuss the option to blind carbon copy (bcc) email addresses as opposed to sending mass emails with all email addresses visible. There are advantages and disadvantages to using bcc. Hiding addresses protects recipients from email scams and viruses that target email recipients, but hiding addresses may also have negative social impacts to recipients who may be concerned that the message is part of an email scam.

* *Even with the most sophisticated technological security measures, oftentimes the most vulnerable security weakness that can be exploited is people themselves. Social engineering is a technique used to gain trust from unsuspecting victims in order to persuade them to share valuable information such as passwords, personal information, and more.*

[Provide a local example of a social engineering scam]

* *What indicators can help you identify a social engineering scam?*

[Briefly discuss] Remind participants of email vulnerabilities, particularly where hypertext are used to mask hyperlinks. Emphasize the personal responsibility that individuals have in ensuring their online security.

* *Using unverified 3rd party apps is a vulnerability, but so is using alternative app providers outside of Google Play on your Android devices or the App Store for iPhone devices for downloading apps. While there may be some advantages to using other app providers, the important thing to know is that we should always be aware of the vulnerabilities in using information resources. Downloading and installing unverified apps can lead to malware and viruses on your devices that can cause problems in your device and compromise your information and security.*

## Netiquette

(4 mins)

[Slide: Netiquette]

* [Use local examples in place of these.] *In most libraries, for example, patrons are expected to be quiet and respectful of the fact that other patrons are sharing the reading space; talking is to be kept to a minimum, and whispering or speaking quietly is expected. On the other hand, at rock concerts, reduced personal distance, physical touching, and sometimes even shoving are the norm; shouting is an expected and necessary means of communication. In a scholarly setting, participants are expected to provide logical arguments with evidence for their statements and speak without extreme emotion; whereas, at a rally or protest, emotion is necessary to persuade others of their cause.*
* *Netiquette, short for “Internet Etiquette,” involves the norms and behaviors, codes of conduct, and general etiquette of interacting online. Similar to physical spaces, there are a variety of online spaces, each with their particular norms and codes of conduct.*
* *There are many differences compared to physical space that impacts communication in the online space. For one thing, users generally can’t see each other, and, often, don’t know each other. This anonymity can be positive or negative. Anonymity can empower people to speak in ways and about things that they otherwise would not in a physical setting amongst people who can see them or that they know.*
* *Another difference: expressing oneself without the benefit of being able to use physical gestures, cues, and emotion. What are some methods you use to express yourself online?* [Emoticons, Internet slang / netspeak, capitalization and punctuation, etc.]
* *Another set of major differences between online and physical spaces is the permanence of information and the ability to disseminate information widely and rapidly to unprecedented numbers of people across the globe in an instant. As a result, Cyberbullying, or bullying online, and hate speech can be particularly damaging.*
* *What are some consequences of violating netiquette expectations?*

Examples:

* Conversation degenerating and moving off topic
* Other participants choosing to exit the online space
* Receiving criticism and social pressure from other participants
* Being banned from further participation in an online space
* Legal repercussions (i.e. defamation law, libel, slander, etc.)
* Physical violence
* *How can you ensure that you are engaging in proper netiquette?*

[Take some examples and discuss briefly.]

## Credit, Credibility, and Copyright

(4 mins)

[Slide: Credit, Credibility, and Copyright]

Paying Credit Where Credit is Due:

* *Related to netiquette and part of online responsibility is properly crediting online sources of information. In addition to acknowledging another’s work by paying credit where credit is due, crediting online sources has the added benefit of boosting the credibility of the referrer by providing evidence of their statements and claims. Having resources credited is also mutually beneficial to the information provider in bolstering their credibility.*

[Provide a relevant local example of how this mutual benefit functions. For example, when a news website refers to your website as a source of credible information, the news website demonstrates its credibility by providing evidence of the news story; in addition, your website reputation as a credible resource is bolstered by the fact that a news website found it to be a credible source.]

Note the distinctions between plagiarism and copyright:

* + Plagiarism = presenting copied information as one’s original work. Example: copying someone’s blog post or other writing and posting or writing as your own.
  + Copyright infringement = using a copy of a work without the author’s permission. Example: making multiple copies of a book, music, or journal article and distributing them to your friends.
* *There are a variety of ways to credit sources of information. What are some ways to credit information sources that you are familiar with?*

Relevant examples that you provide will depend on the experience and interests of your participants. For example, students and professionals may want to learn formal, academic methods for citing references.

Credibility:

The proliferation of online information and ICTs can make it difficult to determine legitimate, credible information and sources. Email phishing scams can often be identified by their unbelievable, “too good to be true” offers, “get rich quick” propositions. Many of these early phishing scams were characterized by poor grammar, punctuation, and spelling; however, phishing scams are increasingly more sophisticated. Particularly over email and phone, phishing scams may identify targets by name, mention legitimate company names or use legitimate logos and company identifiers, and may even have some relevant information related to targets.

* *Finally, as we discussed earlier, the credibility of the source itself must also be determined. How might you determine whether or not a source is credible?*

Encourage participants to think and discuss briefly, filling in as necessary with:

* Author and credentials. Has he/she written other articles considered to be credible? Are the author and his/her credentials considered respectable and authoritative on the subject matter?
* Type of organization. Is the organization considered to be reputable and a credible source for information? What type of information do they provide?
* Content. Does the information appear to be accurate?
* Writing style. Is the information written in a manner that is appropriate as a credible information source?
* References. Do other reputable sources reference this work? Does this work reference reputable sources?
* Date. Is the information current?
* Retrieval. How did you find this resource? Was it found through a reputable channel, for example through a knowledge database or peer-reviewed resource?
* Appearance, spelling, and grammar. Is the format and presentation of the resource appropriate?
* Particularly for email or phone phishing scams, are the messages asking for money, personal, or otherwise valuable information? Most legitimate organizations will not do so over email and phone since this is not a secure form of communication. Do images and logos appear blurry (indicating that they are copies, not originals)?

Phishing scams and non-credible resources are increasingly more sophisticated. Encourage participants to stay vigilant in protecting themselves online.

* *Why does credibility matter?*

There are a number of reasons in various situations: rumor, misinformation, disinformation, etc.

Copyright:

While copyright laws may differ, be nonexistent, or are not enforced in some places, it is important to understand the concept of copyright. Copyright laws are meant to protect the rights of authors related to their works of creation. Using copyrighted material without permission is a legal violation, and violators can be subject to prosecution. Trainers should express this in a manner that is appropriate for their participants in the given situation.

* *What are some things you can think of that can be violations of copyright?*

Sharing music, pirating software, using online images, sharing digital copies of books, articles, etc.

* *How do we comply with copyright?*

This varies, and copyright is a complex, complicated topic that can be tricky to navigate. Generally, acquiring permission from the author to use the work and/or including copyright acknowledgements when using copyrighted information are the minimum requirments. Participants should be made aware that although it is easy to get and use online images, that most are protected by copyright. Participants, however, can and should be encouraged to search for images that are in the public domain and, therefore, not subject to copyright.

## The Cloud

(1 min)

[Slide: The Cloud]

While the Internet has often been represented with the image of a cloud, the contemporary definition of “the cloud” represents more functionality than just the network of networks. Whereas users relied on their devices to manipulate and store information, cloud service providers enable users to manage, store, and manipulate data over the Internet. The National Institute of Standards and Technology describes cloud computing as a model that provides on demand, ubiquitous access to a shared pool of Internet resources. In essence, the Internet is an unstructured network of networks where users can search and access information, while the cloud represents a structured, yet flexible, network of rapidly configurable resources on the Internet. The cloud is characterized by three service models: Software as a Service (SaaS), Platform as a Service (PaaS), and Infrastructure as a Service (IaaS). Depending on the level of participants, trainers will need to adjust how they describe the cloud. It may simply suffice to describe the cloud as:

* *The online space where information can be created, stored, managed, and manipulated.*
* *How many of you have worked in the cloud?*

Participants work in the cloud by default when using their apps without realizing it.

* *The remainder of our activities will be in the cloud. You will use your devices locally, but the information you manipulate will exist on the cloud.*

## Activities

(120 mins)

## **Activity 4.1: Basic Protection Measures**

**(10-30 mins)**

**[Slide: Activity 4.1]**

**Understanding basic protection measures will be helpful for trainers to coach their future participants on how to secure their personal and organization devices, apps, and accounts.**

1. **Have participants identify security settings and modify as necessary:**

* **Device (e.g. password, lock, location settings, remote lock / find / erase, etc.)**
* **Frequently used apps, especially social media and messaging apps**
* **Browser apps (e.g. Do not track, clear data / history / cookies, etc.)**

1. **Practice opening private tabs in browsers**
2. **Open several browser tabs and do random searches**
3. **Close down the browser, then reopen and view search history**
4. **Clear history and cookies, then reopen, and view search history to ensure it is blank**
5. **Secure accounts (e.g. social media, email, etc.)**

**Discussion (5-15 mins):**

* *What security options did you find?*
* *Which did you think were important to set? Why?*
* *How might these security options be important for your organization or personally?*

**Demo (1 min):**

**Display and share an example of real and fake links that you’ve created in Facebook. Emphasize that participants should always hover over hypertext in order to view the actual hyperlinks to ensure they aren’t being deceived.**

* ***Remember that security features are only part of the security equation, and that it’s up to you to remain vigilant about your online security. Where do these links take you? How do you know?***

**Demo (1 min):**

**Use an example of sending messages to multiple individuals in an email with the carbon copy (cc) and blind carbon copy (bcc) options. Demonstrate the same message in a listserv.**

* ***Do you see advantages to using listservs over group emails? How might you use this in your organizations?***

**Depending on how administrators set listservs settings, a major advantage of listservs is the passive means of adding more members. For example, a library or government organization may allow the public to add themselves to listservs to receive email messages. This reduces the load and potential for mistakes in including or excluding email contacts in repeated emails to changing groups. In addition, sending one message to a listserv eliminates the restriction that many email clients and email hosts impose on limiting the number of recipients in an email message to prevent spam.**

## **Activity 4.2: Using Facebook Groups**

**(30 mins)**

**[Slide: Activity 4.2]**

**Facebook groups are a useful space for communicating with others online but in a distinct space within Facebook. We will use Facebook groups as a way to understand digital information literacy. Trainers should create a larger Facebook group for the participants that they can use for examples, participant questions, and discussion.**

**Group Work (5-15 mins):**

1. **Have groups create a Facebook group for themselves**
2. **Instruct groups to modify the settings to limit membership**
3. **Have groups add you to their Facebook group**
4. **Encourage group members to interact and explore in their Facebook group space**

* **Posts vs. messages**
* **Attaching photos and videos**
  + **Single photos / multiple photos**
* **Tagging photos**
* **Creating and managing albums**
  + **Name / rename albums**
  + **Delete albums**
* **Editing posts**
* **Changing the visibility in posts**
* **Deleting posts**

**Discussion (5-15mins):**

* *What are some other security options you found for protecting information in settings?*
* *What advantages and disadvantages can you think of related to these settings?*

## **Activity 4.3: Using Online Content**

**(30 mins)**

**[Slide: Activity 4.3]**

**Downloading and Saving Files:**

**Have participants:**

1. **Find an article in Wikipedia**
2. **Download and save the article as a PDF**
3. **Navigate to the saved file**

**Attaching and Sharing Files:**

**Have participants:**

1. **Send the PDF as a link in email and to the listserv**
2. **Upload the PDF to Dropbox**
3. Upload the PDF file to their Facebook group page

**Saving and Sharing Website Links:**

Using the same Wikipedia article, have participants:

1. Bookmark the link
2. Share the link to Facebook
3. Share the link in email

* Advanced: change the hypertext of the link

**Saving and Sharing Images:**

**Have participants:**

1. **Find an image in Google search**
2. **Send the image in email as an attachment**
3. **Include the link and credentials to acknowledge the source of the image**

Break

(15 mins)

## **Activity 4.4: Intro to Google Docs**

**(50-75 mins)**

**[Slide: Activity 4.4]**

**Demo (10-15 mins): Getting Started with Google Docs**

* Navigating to Google Docs
* Creating a new Google Docs document
* Typing text in the document
* Creating a table in the document
* Inserting an image in the document

Note: Ensure that trainers test this functionality ahead of time to get acquainted with the process. Inserting an image is not possible using the Google Docs app on mobile phones and tablets. Trainers will need to use the desktop version in a tablet to do this. A workaround is to save the document as a Word doc and download on your device, then add the image, and reupload the doc to replace the preexisting Google Doc. If you have a sufficiently capable group of participants, instruct them that this is not a straightforward procedure and challenge them to find information on the Internet to figure this out.

* Sharing the document:
  + With others from Google Docs
  + In Email, Facebook, Dropbox (if applicable), listserv, etc. as a link
  + In Email, Facebook, Dropbox (if applicable), listserv, etc. as an attachment

Group Work (40-60 mins):

1. Have groups create a single Google Doc to work together on
2. Have groups share the document with each other and with you
3. Instruct the groups to explore together and figure out how to:

* Insert a table
* Enter content into the table

It might be helpful to provide elements for the table, for example: a table containing the names of groups members, contact information, and organizations.

* Insert an image

You may wish to challenge participants by having them insert images from various sources such as from their camera, attachment from an email, from a website, etc.

## Wrap Up

[Slide: Review]

* *This concludes module 4. You know understand basic privacy and security measures, online etiquette, referencing online sources, and working in collaborative online environments.*

Take any questions or comments if any.

[Slide: Congratulations]

# Module 5: Putting It All Together

Estimated total time: 3 hours

**Putting It All Together**

In this module, you will apply your knowledge by developing a project, and we will share our project results in the next module. Although you will be working together in your groups in the same space, the idea is to imagine how you might work together on a project when you are in different spaces, for example, when you all return to your respective communities. Each person in the group should provide input and contribute to the project.

**Prerequisites:**

* Module 1: Introduction to Mobile Information & 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

**Topics covered:**

* Mobile Information Literacy project-based learning (putting all 4 previous modules together)

**Objectives covered through the end of this module:**

* Prepare a project using your newly-acquired mobile and digital information literacy skills and knowledge

**How long does this module take?**

3 hours (180 minutes)

## **Outline**

1. Overview <1 min
2. Project Work 150 mins + 15 mins break

## **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 4: Working Online and Using Information via Mobile Devices.

## **Prepare ahead**

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

## **Background information**

The most effective way to reinforce digital information literacy is through constant practice and practical application. This module sets up a project-based learning environment for participants to apply the skills they’ve learned in the previous modules. The projects provided are examples. Trainers should use appropriate projects as necessary according to the needs and experience of their participants. Select projects that will allow participants to practice their mobile information skills and knowledge without focusing too much effort on the content that is generated.

## **Overview**

**(<1 min)**

[Slide: Overview]

Set up the role of project-based learning, expectations for the group project environment, and the requirements for participants:

* *In the previous modules, we’ve covered a wide range of mobile information literacy concepts and techniques. In this module, you will apply your knowledge by developing a project, and we will share our project results in the next module. Although you will be working together in your groups in the same space, the idea is to imagine how you might work together on a project when you are in different spaces, for example, when you all return to your respective communities. Each person in the group should provide input and contribute to the project.*

[Slide: Project Options]

Trainers should determine ahead of time if they will allow participants to choose from a variety of projects or if they will provide a more directed approach to project assignment. Trainers should consider the experience level of participants and the amount of time necessary for trainers to monitor progress and assist groups as necessary. Trainers may wish to print out or project the various project ideas below or ones that they create for the participants to have as guides.

* *The project(s) you will [or may] work is/are: [..]*

## Project Requirements

(15 mins)

[Slide: Project Requirements]

While the project examples below vary, each project should cover the following:

1. Creating a shared online document to work with
2. Providing individual input from all group members on the document content
3. Inserting a table with group member information: name, org, email, phone
   * Advanced: hide table borders
4. Inserting images into the document:
   * Search for images in the public domain
   * Advanced participants: search for and use Creative Commons images along with the appropriate form of citation
5. Exporting the document
   * Advanced participants: save / convert to different file formats
6. Downloading the document to local devices
7. Sharing the document as an attachment (Facebook, email, Dropbox, listserv, etc.)
8. Sharing the document as a link (Facebook, email, Dropbox, listserv, etc.)
   * Advanced participants: change the hypertext of the link (in Facebook, email, Dropbox, listserv, etc.)
9. Practice presenting the group project

Note: trainers should be on the Facebook groups, email, Dropbox, listerv, and other accounts where groups will be sending files. Trainers should project the files for groups during their presentations.

* + Advanced participants: create a slide deck to present

Depending on what was determined ahead of time for the project options, explain one, all, or optional projects in more detail for participants:

Sample Project 1: Event Flyer

* *The goal of the project is to create a 1-page flyer for an event that you are hosting. Using Google Docs, create a new document for your flyer. Each member in the group should have input and work directly on the flyer. The flyer should contain the following information:*
  + *Title of the event*
  + *Purpose of the event*
  + *Description of the event*
  + *Date, Time, and Location*

Sample Project 2: Comic Strip

* *The goal of the project is to create a 1-page comic strip. Using Google Docs, create a new document for your comic strip. Each member in the group should have input and work directly on the comic strip. The comic strip should contain the following information:*
  + *Title of the comic strip*
  + *At least 6 panels for the comic strip*
  + *Text for storylines, speech, sound, etc.*

Sample Project 3: My Favorite Thing

* *The goal of the project is to create a 1-page write-up. Using Google Docs, create a new document for your write-up. Each member in the group should have input and work directly on the write-up. The write-up should contain the following information:*
  + *Title of write-up*
  + *A clear subject for the write-up (e.g. favorite song, favorite recipe, favorite soccer team, etc.*
  + *Description of the subject and what makes it a favorite*

Sample Project 4: How-to Instructions

* *The goal of the project is to create a 1-page set of how-to instructions. Using Google Docs, create a new document for your how-to instructions. Each member in the group should have input and work directly on the how-to instructions. The write-up should contain the following information:*
  + *Title of the how-to instructions*
  + *Description of what the how-to instructions will demonstrate*
  + *Numbered, step-by-step instructions*
  + *Any notes or disclaimers*

Sample Project 5: Wikipedia Article (for advanced participants)

* *The goal of the project is to create a Wikipedia article. Using Google Docs, create a new document for your draft Wikipedia article. Each member in the group should have input and work directly on the Wikipedia article. Once a satisfactory draft has been established, paste the content into a new Wikipedia article. The Wikipedia article should:*
  + *Be on a topic that at least one member of the group is an authority on*
  + *Provide credible references for claims and statements*

## Project Work

Allow groups to get set up and begin working. Trainers should periodically check in with groups and assist as needed. Trainers should strive to help groups by talking groups through accomplishing tasks rather than simply showing them. If all groups seem to have a similar issue, trainers may find it easier to talk through the issue with everyone rather than with separate groups. If groups are having particular difficulty and are moving slowly, trainers may wish to modify projects to an appropriate level where groups will achieve a point of success by the end of the module. For advanced groups, trainers may wish to add more complexity into projects to provide more challenging requirements.

Break

(15 mins)

Trainers may set a time for a break or allow groups to break as necessary.

## Wrap Up

[Slide: End Module 5]

* *This concludes module 5: Putting it All Together. We covered a lot of ground in modules 1-4, and through developing a small project, you were able to apply the mobile information literacy skills and concepts that you learned and practiced. In the next module, you will present your group project, and we will get to see what everyone came up with.*

Take any questions or comments if any.

# Module 6: Module 5 Project Presentations

Estimated total time: 3 hours

**Module 5 Project Presentations**

In this module, groups will share their project results with an audience.

**Prerequisites:**

* Module 1: Introduction to Mobile Information & 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

**Topics covered:**

* Mobile Information Literacy project presentations

**Objectives covered through the end of this module:**

* Present mobile information literacy project using your newly-acquired mobile and digital information literacy skills and knowledge

**How long does this module take?**

3 hours (180 minutes)

## **Outline**

1. Overview 5 mins
2. Presentations 75 mins

* Groups 1, 2, and 3

1. Break 15 mins
2. Presentations 50 mins

* Groups 4 and 5

1. Discussion and Recap 20 mins
2. Post Survey 20 mins

## **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 5: Putting It All Together.

## **Prepare ahead**

Trainers should test that all group projects will display correctly ahead of time.

## **Overview**

**(<1 min)**

[Slide: Overview]

Explain the format for presentations and expectations:

* *Now that you have completed your group projects, let’s share your results with everyone. As you present your project, be sure to include:*
  + *The name of your project*
  + *What your projects is*
  + *What you did*
  + *Any issues you encountered, and how you resolved them*
  + *Any “aha” moments you encountered*
  + *What you learned from the experience*
  + *What you might do differently in the future as a result*

## Presentations

(75 mins)

Break

(15 mins)

## Presentations

(5o mins)

## Discussion and Recap

(20 mins)

Engage participants in a debrief and discussion:

* *Was this project a useful experience for you?*
* *How might you use the lessons in this workshop in the future?*
* *What do you feel was the most useful thing you learned?*
* *What was the least useful thing you learned?*
* *What would make this type of program more useful for you?*
* *How might others in your network benefit from the lessons you’ve learned?*

Provide a recap of the module and modules. Thank and congratulate the participants.

## Post Survey

(20 mins)

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