

MOBILE TECHNOLOGY FOR TEACHERS

An Introduction to Teachers' Personal and Professional Networks for 21st Century Learning

2nd Edition



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Mobile Technology for Teachers (MT4T)

A Teacher Resource Kit Using Mobile Technology for 21st Century Learning in Southeast Asia

An Introduction to Teachers' Personal and Professional Learning Networks for 21st Century Learning





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For more resources on Mobile Technology for Teachers, please visit our website at <u>http://www.seameo-innotech.org/mt4t</u> or download the SEAMEO INNOTECH Reader from your Apple, Android, or Windows device's application store.

Acknowledgments

In developing this Teacher Resource Kit, we relied on a variety of valuable experts and resources. Every effort was exhausted to provide proper credit to sources. If any source was omitted, please notify us for acknowledgment in future publications.

Note that this Kit contains links to third-party websites that are not under the Southeast Asian Minsters of Education Organization Regional Center for Educational Innovation and Technology (SEAMEO INNOTECH)'s control. As such, the Center is not responsible for the content of any linked website, including the links that they contain and any changes or updates made to them. In addition, while the links contained in the Mobile Technology for Teachers (MT4T) e-books were active when they were written, third-party websites may have undergone name, server, and page content changes or removal without warning, causing broken links and missing files.

Note also that the mobile devices used to demonstrate procedures in the lessons in this Kit were an HP 8 tablet running Android 4.2.2, an iPhone 6 running iOS 9.3.1, and an Acer Iconia W4 tablet running Windows 10. SEAMEO INNOTECH does not in any way endorse these mobile devices nor does it have a partnership with their manufacturers. The devices were chosen based on their popularity at the time this Kit was developed.

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Introduction

Welcome to Mobile Technology for Teachers (MT4T), a teacher resource kit that uses mobile technology for twenty-first-century learning in Southeast Asia. MT4T is designed to provide teachers with easy access to information, resources, examples, and best practices in using mobile technology for their personal and professional growth. While MT4T recognizes the availability of a wide array of mobile technologies, it aims to primarily focus on smart phones and tablets. It will enable teachers to navigate mobile devices beyond the typical Short Messaging Service (SMS) or text messaging, and the call function. It is intended to help teachers recognize the huge potential of mobile devices as tools for teaching and learning.

MT4T will equip teachers with a basic understanding of and skills to operate the three most popular mobile platforms—Android, iOS (Apple mobile operating system), and Windows. Also contained in this resource kit are discussions on built-in apps (including examples to expand their functionality) and social networking and blogging which aim to foster collaboration among teachers in Southeast Asia and beyond.

MT4T is composed of a set of e-books available in three mobile platforms—Android, iOS, and Windows. The e-books include the following:

- An Introduction to Mobile Technology for Teachers
- An Introduction to Teachers' Personal and Professional Learning Networks for 21st Century Learning
- Uses and Functionalities of Mobile Devices for Teachers
- E-Citizenship: An e-Book for Teachers on Cyber Wellness and Digital Citizenship
- Facebook for Teachers
- Twitter for Teachers
- Blogging for Teachers
- Edmodo for Teachers
- LinkedIn for Teachers
- Annotated Resources for Teachers

Users of MT4T are supported by a website which makes the e-books available in two file formats: e-pub and PDF. The e-pubs are best accessed using the SEAMEO INNOTECH Reader, which was designed to work consistently across mobile platforms. It also accords users with additional features like creating bookmarks, highlighting important phrases, and even creating drawings or doodles on the e-book pages. You can find out more about the other components of the MT4T Resource Kit from the e-Book on "An Introduction to Mobile Technology for Teachers (MT4T)."

Unique to the Resource Kit are discussions on using mobile technology to promote higher-order thinking skills (HOTS) and values among both students and teachers. Links to teaching and learning resources that promote HOTS have been provided in each e-book. Issues related to 21st century learning such as proper etiquette and digital citizenship are also discussed in several chapters of the e-books.

An Introduction to Teachers' Personal and Professional Learning Networks for 21st Century Learning

This e-book comprises two distinct parts. Part 1 provides an introduction to personal and professional learning networks for teachers and how such networks can be initiated, expanded, and sustained using mobile devices, collaborative apps, and social media. It focuses on teaching educators to use mobile devices in order to develop personal and professional learning networks (PPLNs).

Making the most of today's advanced mobile devices allows teachers to build PPLNs that can help them become the most efficient and proficient educators they can be. Much learning nowadays takes place online via a network of interconnected relationships through blogs and social networking websites such as Facebook, Twitter, and many others. It only makes sense, therefore, that collaboration, communication, and idea and resource sharing among professional peers take place on the same digital platforms as well.

Part 2 of the e-book focuses on twenty-first century teaching and learning. It introduces teachers to the characteristics of twenty-first century educators and provides an overview of Edward de Bono's Six Thinking Hats as a tool to facilitate critical and creative thinking.

PART 1

Chapter 1

What Is a Personal and Professional Learning Network (PPLN)?

A PPLN is an informal learning network that consists of people who are connected by a common interest. It is a network of interrelated connections made for the purpose of discovering, collaborating, and sharing ideas and resources. These connections are created based on learning needs and can be made with like-minded people from all over the world.

PPLNs have been around for a long time. These originally included one's family, friends, and colleagues. Now, thanks to the development of Web technologies and wireless connections, the concept has expanded to include people you have never even met before in person. Much of the learning nowadays takes place online via a network of interconnected relationships through blogs and social networking websites such as Facebook, Twitter, and many others.

What Is a PPLN For?

PPLNs are based on the concept of forming learning communities where educators, including teachers like you who are passionate about developing their learning experiences, recognize the value of sharing experiences, knowledge, and expertise with others. A PPLN's members constantly seek out learning settings or places where they can exchange information, ideas, and experiences. These like-minded people who continuously secure and seek information and exchange of ideas become a learning community. PPLNs are important not only in education, but also in personal and professional development.

Through a PPLN, you can instantly and easily search for, find, and share information and ideas with family, friends, and colleagues. That means you can constantly stay in touch day and night. As a teacher, you can learn from the experiences of your colleagues. This broadens your network of connections and allows you to get to know other cultures and make professional connections around the world.

Why Use a PPLN?

A PPLN enhances your social interactions with peers all over the world. It enables you to share ideas, thoughts, and resources, as well as engage in discussions that cultivate your mind. For instance, a PPLN can help when you are faced with difficulties regarding a subject area. By posting a question in a PPLN, co-teachers who have encountered the same problem and found working solutions can respond.

Another example is when you want to visit a new place and would like to know something about it. You can just post a query in a PPLN and expect useful responses from comembers.

How to Establish and Use a PPLN

This section introduces different tools that you can use to build your own PPLN, including social media. Social media have become a great means to build a PPLN. They allow you to connect, communicate, and collaborate with family, friends, peers, colleagues, and even mentors. Some of the social media platforms, which can be used as a platform for building PPLNs are social media sites like Twitter, Facebook, and LinkedIn. These three platforms are discussed in more detail in other MT4T e-books that can be downloaded through the MT4T website at http://www.seameo-innotech.org/mt4t. The MT4T website itself has a section that offers the option to network and interact with other educators and to share resources with them through an asynchronous discussion board. Visit the site now and start contributing to an online discussion or start your own discussion thread.

E-Mail

One of the most basic digital tools for building a PPLN is the electronic mail or e-mail. Most social networking websites require an e-mail address for registration. Websites such as Twitter and Facebook have become mainstream, especially with the introduction of mobile technologies, but e-mail remains a very important tool for communication, collaboration, and information exchange.

• How to Create an E-mail Account

An e-mail refers to a message transmitted over an electronic network such as the Internet. Heinz Tschabitscher wrote for <u>Lifewire.com</u> in May 2017 the article <u>"What is</u> <u>E-mail?</u>" that gives an overview of what an e-mail is. The following are excerpts from the article:

- ✓ The e-mail message. Instead of using a pen to write a letter on paper, you use your keyboard to type an e-mail message in an e-mail program on your personal computer (PC).
- Sending an e-mail. When an e-mail is finished and has been addressed to a recipient's address, you do not put a stamp on and post it but click the Send button in the program. This sends the e-mail on its way.
- *E-mail transport.* While postal services transport letters and parcels, e-mail servers transmit e-mails from a sender to a recipient.
- Fetching new mail. If you get new mail in your mailbox (a folder in your email account that contains your messages), you go and fetch it. Similarly, your e-mail program can check for and download new e-mails from your server for you to read.

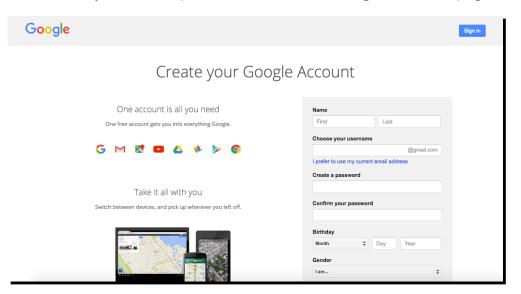
Many e-mail service providers can be seen on the Internet, including Google, Yahoo!, AOL, and Microsoft. Registering for an e-mail account provides you with your own password-protected (so only you can access it) e-mail address where you can send and receive messages. Gmail is one of the most popular free e-mail service providers today. Read "How to Create a Gmail Account" and "How to Use Gmail" to know more about creating and using a Gmail account.

In this section, you will learn to create your own Gmail account if you do not have one yet. It is okay to use your PC, but we would suggest that you do this using a Web browser installed on your mobile device. Follow the step-by-step guide below.

Open the Web browser on your mobile device. It can be Chrome, Firefox, Internet Explorer, or Safari. Please note that creating a Gmail account from any of these Web browsers makes little difference. In this case, we used Chrome.

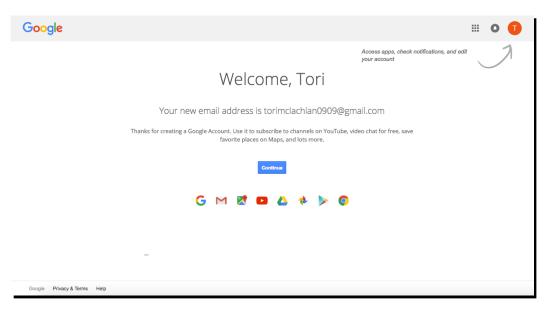


1. Type "<u>https://accounts.google.com/signup</u>" into the **Address** field, and then hit the **Enter** key. This will open the **Create Your Google Account** page.



2. Fill in the required details—your first and last names, username, password, birthday, gender, mobile phone number, current e-mail address (only if you have one), and location. Your password should be a minimum of eight letters (lowercase, uppercase, or a combination of both), numbers, or special characters, or a combination of all. Note that your username will be part of your e-mail address. It is like a screen name on Gmail. Make sure that you always remember your password because you will need it to open your account. It is important to indicate your mobile phone number in case you forget your password and need to reset it. Google will send you a text message through that number.

Once done filling in all the details, click **Next.** This opens to a pop-up window about Google's **Privacy and Terms.** Read through the text and at the bottom of the page, click **I Agree.** You should see the **Welcome** page after that.



3. Congratulations! You now have your own Gmail account. Click the **Continue** button to access your inbox.

Social Networking Websites

Several social networking websites exist today. The MT4T Teacher Resource Kit currently focuses on two of the most popular ones—Facebook and Twitter. To know more about using them via mobile devices, read the MT4T e-books, "Facebook for Teachers" and "Twitter for Teachers." Learn to be confident in using these websites because other social networking websites, such as Edmodo, have been modeled after them.

We chose these social networking websites not only because they are the most commonly used, but also because they can be used by basic, intermediate, advanced, and expert users. If you are fairly new to social networking, it is best to start with them. As you progress, you can seek out other social-networking platforms. The e-books in this Resource Kit serve only as starting points in your journey toward building your own PPLN.

E-Discussions/Blogs

An essential element of successfully building a PPLN is participating in e-discussions or electronic discussions with other teachers and education stakeholders, particularly through blogs. To stay updated on your PPLN comembers, you are encouraged to read, comment on, and react to their posts. By giving feedback, you help those who are in need and, in the future, can receive help yourself. For more details on blogging, read the MT4T e-book, "Blogging for Teachers." It contains guides and tutorials on participating in online discussions and how to establish your own blog.

Chats

A chat is an online conversation where you can immediately send and receive messages. Today, you will often hear people say, "I chatted with my Malaysian friend last night." They probably did not talk over the phone, which can be expensive. They probably "talked" to each other via an instant-messaging (IM) or a chat app.

Chatting does not cost anything as long as you have an Internet connection. It is like talking to another person or other people via a PC or a mobile device no matter where you are. It is a good way to communicate and connect with family, friends, and colleagues even if you live thousands of miles from each other. Examples of chat apps include Facebook Messenger, Google Hangouts, Yahoo! Messenger, and Skype.

Chapter 2 What Is Collaboration?

The key to establishing an effective PPLN is to promote opportunities for collaboration with like-minded colleagues. But what is collaboration?

Collaboration is a means by which people come to work together to achieve a common goal. Through collaboration, you can share knowledge, learnings, and resources, and build a consensus. Collaboration is one way to foster understanding, both among students and teachers, thus improving gains in learning.

One example of collaboration is when two or more teachers in a school band together to work on a lesson, trying it out in their classes, and coming again together to discuss how the lessons can be enhanced to sufficiently improve student learning.

Another example is getting help with a lab experiment. If you have a PPLN comember who is a chemist, you can invite him or her to become a guest lecturer. Once he or she agrees, you can assemble your class in a room and set up a videoconference for a discussion or even a live experiment. These can be made possible using your mobile device's built-in camera.

How to Collaborate with Others Using your PPLN

Collaborating with others is as simple as asking a friend to help you prepare a lesson plan. You can also be the one helping others. An example is sharing a presentation with a PPLN comember who asks for your help to find an animated video that explains how the heart pumps blood throughout the human body. If you happen to have a good presentation that your students enjoyed, you can share it with him or her via email.

Your PPLN is a useful avenue for collaborating with coteachers or fellow educators. It lets you seek and provide help, allowing your network to continuously grow. The following are more examples of collaboration:

• You planned a lesson about plants seen in a forest. You want to show your class the biggest flower in Southeast Asia so you post this on your Facebook wall. A friend of yours happens to be a park ranger in Malaysia. He or she said you can use FaceTime to give your students a "virtual" walk in the forest. On the day of the lesson, you connect your iPad to a projector and a speaker, and then call your friend. He or she accepts the call and greets your students. Using his or her iPhone, he or she takes your students on a virtual tour of a forest near Mt. Kinabalu in Malaysia. He or she shows off the various plants in the forest, taking

time out to explain what each is. He or she then points out the biggest flower in Southeast Asia and talks about it. Plan accomplished!

• You are about to teach your students about the solar system and you want them to learn about each planet. However, you do not know what technologies and tools you can use, so you Tweet contacts for help. A friend suggests you use an augmented reality (AR) app designed to display a three-dimensional (3D) model of the solar system and gives you information and some materials. On the day of the lesson, you connect your tablet to a projector and lay an AR marker that you downloaded from an app store on a table. You then focus your tablet's built-in camera on the marker. The whole class will be amazed to see a 3D rendering of the solar system on the classroom's walls.

What Chat Apps Can You Use for Collaboration?

- Skype. This is a chat service that offers free video calls between subscribers. In addition to standard videoconferencing calls, it also enables file transfers and text messaging. The service is available on PCs and mobile devices. You can download the app from https://www.skype.com/en/download-skype/.
- Google Hangouts. This is a free chat service that enables both one-on-one and group chats with up to 10 people at a time. It is similar to Skype and FaceTime. Unlike other chat apps though, Google Hangouts focuses more on "virtual faceto-face" group interaction than one-on-one chats. It can be accessed via PCs and mobile devices. In addition to video chatting, its users can also share documents, scratchpads, images, and YouTube videos. Download Google Hangouts from https://hangouts.google.com/.
- **FaceTime.** FaceTime is a video-chat app developed by Apple for the sole use of Apple devices. That means you can use it to contact only those who own an Apple device. If you want to call someone's iPhone, just dial his or her phone number on FaceTime. If you want to reach someone on an iPad, an iPod touch, or a Mac, use his or her e-mail address.

Chapter 3 What are Social Media?

Social media refer to tools that promote interaction, discussion, and collaboration by allowing people to build relationships and share information. These include several collections of Internet-based tools and platforms that increase and enhance information sharing. They allow the transfer of text, photos, audio and video files, and other forms of information among Internet users. Examples of such include Facebook, LinkedIn, Twitter, Diigo, Edmodo, and Pinterest.

How Can You Use Social Media?

Using social media for personal and professional development allows teachers to develop content, ideas, and resources. Social media are full of passionate educators who try to learn and grow together in a way that benefits their communities, schools, classrooms, and students. Detailed explanations on how you can use different types of social media for teaching and learning as well as personal and professional development are further explained in four MT4T e-books—"Twitter for Teachers," "Facebook for Teachers," "Edmodo for Teachers," and "Blogging for Teachers."

You can use social media to connect with family, friends, and colleagues. Create a network of colleagues with whom you can share best practices in using social media and various other technologies for teaching and learning.

Chapter 4

What is a Web Conference or Webinar?

A conference is a large gathering of individuals or members of one or several organizations to discuss matters of common interest. With the advent of social media and Web-based tools, conferences can also be conducted online. These are known as Web conferences or webinars. In today's connected era, holding a conference can refer to talking to a group of people at the same time via a phone call or by means of videoconferencing. It can also refer to attending a lecture or a seminar online via a mobile device, with the means to post questions and get answers in real time.

How Can You Participate in a Web Conference or Webinar?

You can participate in a Web conference via several ways. You can be invited to attend or do so at your own accord. Most web conferences can be accessed via a dedicated web link sent to prospective participants by the conference organizer. Oftentimes, Web conferences are advertised. Social networking websites post announcements of webinars from time to time.

To attend a Web conference or a webinar, you simply contact the conference organizer to indicate your interest in participating. The conference administrator will then send you an e-mail with the Web conference or webinar link so you can participate. The platforms commonly used to host Web conferences or webinars include Google Hangouts, Webinars OnAir, Skype for Business, GoToWebinar, and Cisco WebEx, among others.¹

Most Web conferences or webinars do not require you to pay a fee though some admittedly do. EdmodoCon is a good example of a Web conference for educators. It can be accessed at <u>https://www.edmodocon.com/</u>. It is an annual free online conference where teachers share and showcase ways on using Edmodo and other digital tools in the classroom. For more details on using Edmodo, read the MT4T ebook, "Edmodo for Teachers."

¹ Nathan B. Weller, <u>"The 15 Best Webinar Software Products from Around the Web,"</u> *Elegant Themes, Inc.,* January 17, 2015.

Chapter 5

How to Use Mobile Devices to Search for Educational Resources

Educational resources help in your pursuit of personal and professional growth. According to <u>wiseGEEK.com</u>, educational resources are commonly classified based on delivery and the basic medium used. Schools can be considered as a primary educational resource. It is a place where you can begin to encounter ideas and concepts outside of the ordinary realm of thinking. Books are also widely acknowledged as an educational resource. After-school programs and other extra curricular activities are another type of resource. On the other hand, the educational value of videos, multimedia presentations, and even web-based materials are still contentious, depending mostly on the circumstance and opinion of the one evaluating the resource. Nonetheless, "most experts agree that almost anything can be a resource for education provided it is used properly."² This includes the myriad of resources now available to mobile device users on the Internet.

How to Find Online Educational Resources

Through the years, Internet has revolutionized education in a variety of ways. It provides an excellent source of educational materials. It has also been used as a medium for the delivery of learning. With your mobile device, you can connect to the Internet and do a simple online search which will lead you to a multitude of educational resources. Take note, however, that careful evaluation and consideration of the search results must be applied. In order to benefit fully from what the Internet offers, it is best to stick to the more reputable websites hosted by known organizations.

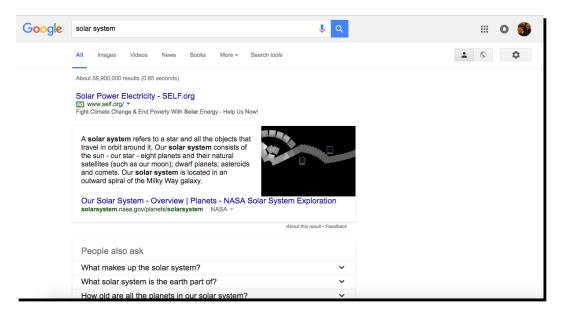
Here is a step-by-step guide on how you can search the Internet for available educational resources using your mobile device. Let's use the solar system as an example.

1. Open the web browser installed on your mobile device. This can be Google Chrome, Mozilla Firefox, or your phone's own Android browser. Once tapped, your browser will instantly open a page that will let you search for anything on the Internet. Because we made Google Search the default search engine, the web browser should automatically open the page on Google.

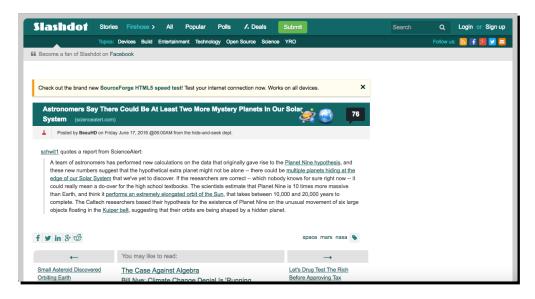
² "What are the different types of educational resources?" *wiseGEEK*, <u>http://www.wisegeek.com/what-are-the-different-types-of-educational-resources.htm</u>

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	Goo	ogle			
Search Google or type	e URL		Ŷ		
🤊 Trend Micro	How much is your sto	How much is your sto	Crossover - The World		
			The The Skips Teacher		
TrendLabs Editorial C	🔊 Dashboard Trend Mil	🔊 North American Under			

2. Type "solar system" into the **Search Google or type URL** field or directly type it into the address bar. Press the **Enter** key.



3. Thousands of search results will appear. Note that the top 10 are usually the best results. Click a result that is most relevant to your needs. In this instance, click the first link under **In the news.** This will open a page where you can read a current news article on the solar system.



4. The page should give you a lot of useful information. If it did not provide the right answers to your questions, just go back to the search results page and click another link until you find what you are looking for. Congratulations! You now know how to search for online resources.

Probably one of the best websites that provide a lot of useful educational resources today is Educational Technology and Mobile Learning. To access this site, follow the step-by-step guide below.

1. Open your Web browser. Type "<u>http://www.educatorstechnology.com/</u>" into the **Address** field, and then hit the **Enter** key. This will open the site.



2. On the menu (blue boxes along the top portion of the page), click the **all categories** button. This will open a page that lists the main topics that you can learn about from the website.

Educational Technology and A resource of educational web tools and mobile	A Mobile Learning
home google drive 4 teachers all categories ed tech resources posters ipod reso 1 Free Homework Holp Math English Science	
CATEGORIES Click on any title to access the resources it contains. • 21st century education	We are hiring English trainers!
21st century teaching skills	Earn up to PHP 58K/mo.
3D Printing 9/11 resources Academic blogging	AQRA
<u>Academic groups</u>	Bizmates

3. Click **21st century education.** A list of resources on that topic will appear. You can choose to read all of the resources or only those that are relevant to your needs.

A resource	e of educational web tools and mobile apps for teachers and educators
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	POSKA PIOOK P13,888
	owing posts with label 21st century education. Show all posts
ANOTHER EXC	ELLENT POSTER FEATURING 10 DIGITAL
	ELLENT POSTER FEATURING 10 DIGITAL

4. Congratulations! You now know how to access one of the best sources of educational resources on the Web.

How to Evaluate Online Educational Resources

The Internet is like a huge marketplace offering countless information and resources. With just one click, you can get tons of information about a certain topic offered by different websites. While this may seem exciting, particularly for knowledge-hungry people, it can also be overwhelming. That is why, you as an educator must learn to be more critical of the information and resources that you get on the Internet. You must, in turn, pass these skills on to your students so that they, too, will learn to be more discerning and not be misled by false or incorrect information, and then add to the spread of such information.

There are websites that offer a quick way to determine whether something that has gone viral³—like a controversial video—is true or is factual. **Snopes.com** is one such website. It is considered as the largest fact-checking site that is well trusted and has come to be regarded as a popular dispeller of rumors and urban legends. The website **Kathy Schrock's Guide to Everything** has a page, titled <u>"Critical Evaluation,"</u> which presents a comprehensive list of web articles that will guide teachers like you to learn how to critically evaluate online information, how to teach the process; and also a list of bogus websites, which shows that not all information you get on the Internet are real. It even has a video that demonstrates how to evaluate a website, and some downloadable files.

For some quick tips on how to evaluate resources found online, here's an infographic⁴ from **hostingfacts.com**.

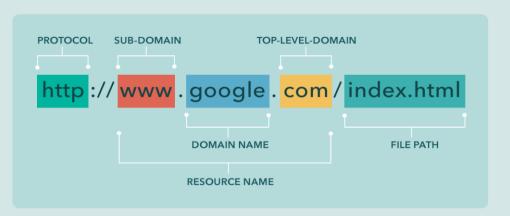
³ According to Collins Online Dictionary: "Go viral" means to spread quickly and widely among Internet users through social media, email, and others, as in a video, an image, or a story.

⁴ An infographic is a visual representation of information or data done to provide quick understanding



	UP-TO-DATENESS	AND RELEVANCE
	THE CONTENT AND INFORMATION IS UP-TO-DATE AND RELEVANT.	THE CONTENT USES STATISTICAL INFORMATION WITH TITLE AND DATE FOR REFERENCING.
Э	THE CONTENT SHOWS "MOST RECENT CHANGES AND UPDATES" ON THE CONTENT ITSELF.	THE WEBSITE IS WELL MAINTAINED, WITH VERY MINIMAL TO NO BROKEN LINKS.
	ACCU	RACY
	THE CONTENT IS FREE FROM SPELLING ERRORS.	THE CONTENT IS WELL-WRITTEN AND GRAMMATICALLY CORRECT.
Q	THE CONTENT HAS BEEN THOROUGHLY EDITED AND REVIEWED.	THE SOURCES INDICATED ON THE CONTENT IS RELIABLE AND VERIFIABLE ELSEWHERE.
	PURPOSE AND	OBJECTIVITY
*	THE CONTENT SERVES ITS PURPOSE - TEACH, INFORM, EXPLAIN, PERSUADE ETC.	THE AUTHOR OR PUBLISHER IS NOT BIASED ON COVERING ANY SUBJECT.
	THE INTENDED AUDIENCE IS CLEARLY IDENTIFIED WITHIN THE CONTENT.	YOU UNDERSTAND THAT THE CONTENT IS COVERED WITH FACTS, OPINION, OR PROPAGANDA.
60	THE POINT OF VIEW IS CLEARLY WRITTEN THROUGHOUT THE CONTENT.	THE PUBLISHER CLEARLY OWNS RESPONSIBILITY ON PROVIDING ACCURATE INFORMATION.
	LIN	KS

> The Structure of a Website Address <



The Top-Level Domain (TLD) says a lot about the authority of webpage:

DOMAIN TLD

PUBLISHED BY

.COM	••	a commercial or business
.EDU	••	an educational institution or university
.NET	••	a network organization
.ORG	••	a non-profit organization
.GOV	••	a government website (location dependent)
.CA	••	a website from Canada
.UK	••	a website from UK

CONCLUSION

Be critical of any information you find on the Web and carefully examine each site.



The Internet is growing fast; there are millions of content that gets published online everyday. Examining and being critical to online materials that we come across in the Internet is important. Web pages are susceptible to both accidental and deliberate alteration, and may move or disappear without notice.

Source

http://www.library.georgetown.edu/tutorials/research-guides/ evaluating-internet-content



http://www.lib.umd.edu/binaries/content/assets/public/

usereducation/evaluating-web-sites-checklist-form.pdf



Chapter 6 What Is Digital Citizenship?

Digital citizenship refers to the norms of appropriate, responsible behavior with regard to using technology. To participate effectively as a digital citizen and to interact with private and public organizations, you should have extensive skill in using, knowledge of, and access to the Internet through a PC⁵ or mobile device⁶. People who characterize themselves as "digital citizens" often extensively use information technology (IT) to maintain blogs⁷, use social networks⁸, and participate in online news websites. Just like literacy and numeracy initiatives, which provide people with skills to become part of a workforce, digital literacy is essential in order to gain confidence, stay connected, and actively participate in the digital world in the twenty-first century.

If you are to use mobile devices and social media to establish and expand your PPLN, you need to be a responsible and effective digital citizen.

Why Is Becoming a Responsible Digital Citizen Important?

As a teacher, you are responsible for educating students while learning alongside them. You cannot teach them to become good digital citizens if you are not one yourself. You are a citizen of your country and as such, have to observe its laws. As a digital citizen, you also need to obey certain rules and regulations such as copyright and privacy laws.

"<u>5 Reasons You Should Be Teaching Digital Citizenship</u>" gives the following reasons why teachers and students should learn about digital citizenship:

- The growing gap. If you accept the fact that most people will continue to embrace new technologies without fully examining the consequences of their implementation, then it is time to bring your curriculum up to speed. Some educational technologies are fads, of course, but students will continue to devour opportunities to use available devices whether or not they are embraced in school. The gap between what students do with their mobile phones and what they can do is striking, and it will only grow unless we fully embrace the ubiquity of digital connectivity in our lives.
- **Digital footprints are easy to make.** Given that many colleges and employers judge prospective students and employees based on their social media profiles,

⁵ Margaret Rouse, "Definition: personal computer," *WhatIs.com,* <u>http://whatis.techtarget.com/definition/personal-computer-PC</u>

⁶ "Mobile Device," techopedia, <u>https://www.techopedia.com/definition/23586/mobile-device</u>

⁷ Kenneth Byrd, "What is a blog?" *BlogBasics*, <u>http://blogbasics.com/what-is-a-blog/</u>

⁸ Margaret Rouse, "Definition: social networking," *WhatIs.com*, <u>http://whatis.techtarget.com/definition/social-networking</u>

we need to teach students to create online personas that project more positive constructions of themselves. Many students are shockingly unaware that adults are able to access their profiles.

- It is real life. Educators frequently hear the need to make learning authentic and real to kids. There is nothing so consistently entrenched in students' daily lives as their use of digital technology, and ignoring this fact leads to missed learning opportunities. In fact, one of the Common Core State Standards reads, "Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others." This is a vague directive, but it leaves the door wide open for testing all possible digital tools to spur student writing and collaboration.
- **Students and their culture of relentless multitasking.** With evidence mounting against the efficacy of multitasking, and anecdotal evidence swamping educators, it is foolish to avoid deliberately challenging the students to resist multitasking. If we desire for students to thrive in the digital world, they must be taught and practice mindfulness and sustained attention, in addition to understanding the consequences of constantly checking their mobile phones and jumping from window to window on their PCs.
- **Content curation is information literacy.** One of the most empowering elements of social and digital media is the opportunity to learn anything, anytime, and anywhere. There are thousands of worthwhile sources out there, but seeking out, selecting, and streamlining information sources are often ignored in schools. In English class, students should be able to cite and compile websites or blogs dedicated to literature or writing. In social studies, they should be able to create a Twitter list and follow updated current events from reliable sources.

For more information on teaching digital citizenship in school, read the following articles:

- <u>"What Your Students Really Need to Know About Digital Citizenship,"</u> by Vicki Davis
- <u>"6 Must-Read Posts on the Importance of Teaching Digital Citizenship"</u>
- <u>"Why Is Digital Citizenship Important? Even for Youngest Kids,"</u> by Prasanna Bharti

What Are the Elements of Digital Citizenship?

According to <u>"Nine Themes of Digital Citizenship,"</u> digital citizenship has the following themes:

- Digital access. Technology users need to be aware that not everyone has the same opportunities when it comes to technology. Working toward equal digital rights and supporting electronic access is the starting point of digital citizenship. Digital exclusion makes it difficult to grow as a society that increasingly uses these tools. Helping to provide and expand access to technology should be the goal of all digital citizens. Users need to keep in mind that there are some that may have limited access, so other resources may need to be provided. To become productive citizens, we need to be committed to make sure that no one is denied digital access.
- **Digital commerce.** Technology users need to understand that an increasing share of the market economy is being done electronically. Legitimate and legal exchanges are occurring, but the buyer or seller needs to be aware of the issues associated with it. The mainstream availability of Internet purchases of toys, clothing, cars, food, and other things has become commonplace to many users. At the same time, an equal number of goods and services, which are in conflict with the laws or morals of some countries, is surfacing. Users need to learn about how to become effective consumers in a new digital economy.
- **Digital communication.** One of the significant changes within the digital revolution is a person's ability to communicate with others. In the nineteenth century, forms of communication were limited. In the twenty-first century, communication options have exploded to offer a wide variety of choices. The expanding digital communication options have changed everything because people are able to stay in constant communication with anyone else. Now, everyone has the opportunity to communicate and collaborate with anyone from anywhere, anytime. Unfortunately, many users have not been taught how to make appropriate decisions when faced with so many different digital communication options.
- **Digital literacy.** While schools have made great progress in the area of technology infusion, much remains to be done. Renewed focus must be made on what technologies must be taught as well as how they should be used. New technologies that are not being used in school are finding their way into workplaces. In addition, workers in many different occupations need immediate information. This process requires sophisticated searching and processing skills. Learners must be taught how to learn in a digital society. In other words, learners must be taught to learn anything, anytime, and anywhere. Business, military, and medicine are excellent examples of how technology is being used differently in the twenty-first century. As new technologies emerge, learners need to learn how to use them quickly and appropriately. Digital citizenship involves educating people in a new way because they need information literacy skills.

- **Digital etiquette.** Technology users often see this area as one of the most pressing problems when dealing with digital citizenship. We recognize inappropriate behavior when we see it, but before people use technology they do not learn digital etiquette. Many people feel uncomfortable talking to others about their digital etiquette. Often, rules and regulations are created or the technology is simply banned to stop inappropriate use. It is not enough to create rules and policies, we must teach everyone to become responsible digital citizens in this new society.
- Digital law. This deals with the ethics of technology within a society. Unethical use manifests itself in form of theft and/or crime. Ethical use manifests itself in the form of abiding by the laws of society. Users need to understand that stealing or causing damage to other people's work, identities, or properties online is a crime. There are certain rules of society that they need to be aware in an ethical society. These laws apply to anyone who works or plays online. Hacking into others' information; downloading illegal music; plagiarizing; creating destructive worms, viruses, and Trojans; sending spam; or stealing anyone's identity or property is unethical.
- Digital rights and responsibilities. A basic set of rights should be extended to every digital citizen. Digital citizens have the right to privacy, free speech, and so on. Basic digital rights must be addressed, discussed, and understood in the digital world. With these rights also come responsibilities. Users must help define how a technology should be appropriately used. In a digital society, these two areas must work together for everyone to be productive.
- **Digital health and wellness.** Eye safety, repetitive stress syndrome, and sound ergonomic practices are issues that need to be addressed in a new technological world. Beyond physical issues, psychological issues such as Internet addiction are also becoming more prevalent. Users need to be taught that there are inherent dangers of technology. Digital citizenship includes a culture where technology users are taught to protect themselves through education and training.
- **Digital security.** In any society, there are individuals who steal, deface, or disrupt other people. The same is true for the digital community. It is not enough to trust other members in the community for our own safety. In our own homes, we put locks on our doors and fire alarms to provide some level of protection. The same is true when it comes to digital security. We need to have virus protection, data backups, and surge control for our equipment. As responsible citizens, we must protect our information from outside forces that may cause disruption or harm.

How Can Digital Citizenship Benefit You?

Typically, when people act with mutual respect and responsibility, we say they are good citizens. When this takes place in online interactions, we call it "digital citizenship."

As teachers, we give students daily reminders such as "Be careful," "Do not cross the street without an adult," and "Do not talk to strangers." Looking at the youth today, do you think they are getting the right reminders about online safety and responsible online behavior? Are these imparted daily by the adults whom they trust? When schools and teachers take time to share good digital citizenship practices, students, along with the whole digital community, benefit.

You only need to read the headlines to know that there is a pressing need to emphasize both safe and responsible use of the Internet. With the rapidly changing technologies, there is no doubt that ongoing discussions on what is right, what is true, and what it means to be a good digital citizen can benefit everyone.

We have heard and read news on government officials and prominent personalities whose lives and careers were destroyed because of posts and comments made years ago. We do not differ from them because we use the Internet, too. That is why we should practice good digital citizenship by adhering to Netiquette rules.

Chapter 7

Using Appropriate Netiquette in Your PPLN

According to the British Broadcasting Corporation (BBC), the word "Netiquette"⁹ is a combination of "Net" (from "Internet") and "etiquette." It means respecting other users' views and practicing common courtesy when posting your views on online discussion groups.

Proper Netiquette is just as important as proper etiquette in the real world. In reality, a person can communicate with others in many different ways that some commonly understood words may have little meaning. On the Internet, words are often the sole determinant of a message's meaning. As such, observing proper Netiquette is important in digital communication because it can be misconstrued more than in real conversations.

How to Practice Proper Netiquette

Mark C. Frank, in <u>"Netiquette Rules for Electronic Communications,"</u> posted in <u>edtech2.boisestate.edu</u> the following rules when engaging in electronic communications:

- **Spelling and grammar.** Always adhere to grammar rules and correctly spell words. Poor grammar and misspellings are unprofessional and poorly reflect on you and your message. Type your message or post in a word processor like Microsoft Word, use the spelling and grammar checker, make the necessary changes, then copy and paste the text to the posting console. Take time to ensure that your audience does not have to read a poorly written message.
- **The "you" attitude.** When communicating in the business world, avoid using "me" or "I." Business messages should be about the reader and not the writer. Talk about the other person and use "you" and "your" in your messages. After all, it is a "me" world out there and that is what your business audience wants to hear about—themselves and not you. There are exceptions to this rule such as in online classrooms and websites. But business writing requires the "you" attitude at all times while sending e-mails, memos, and letters.
- Write concisely. Get to the point. Follow the concept of concise writing and do not ramble on with unnecessary words. Only write what is necessary so your audience can quickly read your message and move on. People have many other e-mails and Web pages to read, and if you write senseless words leading to a long e-mail or electronic message, people may move on to their next reading.

⁹ "What is netiquette?" *BBC*, <u>http://www.bbc.co.uk/webwise/guides/about-netiquette</u>

- **Proofread.** Always proofread your message! You do not have the opportunity to use body language while communicating over the Internet, and people may missinterpret your message if you do not write with good tone. Do not write messages that are confrontational, rude, and foul mouthed, or All Caps (MEANS SHOUTING!). A good suggestion is to read aloud your message to ensure it is a polite and courteous communication for your audience.
- Use good tone. You do not have the opportunity to use body language while communicating over the Internet, and people may misinterpret your message if you do not write with good tone. Do not write messages that are confrontational, rude, foul-mouthed, or in all capital letters, which is equivalent to shouting. Read your message aloud to ensure it is polite and courteous. Good tone is critical in electronic writing. The wrong words can leave a bad impression and upset the reader, especially on e-mails and online classroom discussions. It is easy to sound bossy and unprofessional with persuasive messages, and since many online social media are asynchronous, you do not have the opportunity to immediately respond or allow the audience to see your body language or hear the tone of your voice. Always check your writing to ensure it is polite and neutral sounding when you make requests and convey information. An e-mail with good tone can accomplish much more than one that is overbearing and written with the "me" attitude. Remember, the "you" attitude is a good way to convey your messages with good tone.
- **Double-check e-mail addresses.** With e-mail programs, it is easy to send a message to the wrong e-mail address.
- Keep file sizes small. People do not want to wait for long downloads. Even with today's high-speed connections, large file sizes are annoying and will cause the person downloading the message to abort. If you know your file's size is large, be sure to convert a document, for instance, into Portable Document Format (PDF) prior to attaching to your message. Always convert long documents, large graphics, and pictures into PDF to ensure that their sizes are reasonable and they are quick to download, especially for those who do not have fast connection speeds. If you do not want to convert pictures into PDF, optimize them using Adobe Photoshop or another image-editing program.
- Internet messages are permanent. Be careful with what you write. Sometimes, it is best to keep thoughts to yourself because the Internet keeps a permanent record of what you send. You cannot retract or delete messages or posts so if you do not want your messages to be read by the wrong people, you probably should communicate them using other media to avoid miscommunication.
- **Be respectful.** Promptly respond to other people's messages. If they ask for a return acknowledgment or receipt, give it to them. Be polite, friendly, and

professional at all times. Many of these rules imply respect for the reader; the Internet keeps a permanent record and reflects on you as a person. Use these rules to your advantage by thinking about your messages and who will read them. The Internet can be a great tool for building a good reputation and getting respect from peers.

• **Be professional at all times.** Avoid getting into arguments in chat rooms, online classrooms, or e-mails. This happens often and is a result of the ease of sending a message while upset, and out of spite or revenge. Since the other person is not present, we often use the power of electronic writing to vent or lash out at him or her. If you become upset at a person, do not respond electronically until you have had time to put the issue into perspective. Remember, electronic messages are permanent. Do not put yourself in a position with an unprofessional message you may regret later. It may come back to haunt you.

The following are other Netiquette tips from <u>Internet Guide</u>, which you can practice from <u>"Internet Ethics and Netiquette"</u>:

- Do not use someone else's name or identity.
- Do not post or distribute a material that is deemed illegal.
- Do not use abusive or threatening language.
- Do not post insulting remarks regarding people's gender, race, ethnicity, age, physical disability, religion, or other forms of discrimination.
- Do not spam message boards or chat rooms with useless or repeated messages.
- Do not try to obtain or use someone else's password.
- Do not try to obtain personal information about someone.

What Happens If You Do Not Adhere to Proper Netiquette?

Using proper Netiquette will lessen instances of misunderstanding or getting into arguments with fellow members of your PPLN. Not adhering to proper Netiquette can potentially have lasting consequences, including unnecessarily embarrassing yourself, "toxic by undermining teamwork, and breeding worry" engaging in miscommunication. Many of these can be easily corrected by just maintaining a balance between e-mail and face-to-face communication. Improper Netiquette can encourage other people to alienate you. Conflicts with other people are a consequence of not adhering to proper Netiquette. Never assert that e-mail messaging is safe and secure; e-mail messages are stored on backup servers for years. If you do not practice proper Netiquette, embarrassing instances can occur. Note that when communicating online, no one is immune to miscommunication. But proper Netiquette can minimize hurt feelings, relationships, and embarrassing moments.

Chapter 8

How to Use MT4T E-Books to Enhance Your Personal and Professional Learning Networks

Now that you are familiar with some key concepts and tools to establish PPLNs, you are ready to further explore the possibilities that mobile devices and social media have to offer as tools to facilitate their establishment and growth. The MT4T Teacher Resource Kit contains a set of e-books designed to help teachers maximize the use of mobile devices and social media as tools to enhance personal and professional development. Below is a summary of the content of each MT4T e-book.

E-Book 1: An Introduction to Mobile Technology for Teachers

Recent studies, research, projects, and applications focus more on teaching students to use mobile technologies. Not a lot of resources, meanwhile, are devoted to helping teachers keep up. In fact, there is now an emerging divide between students as digital natives and teachers as digital migrants. This is because students are more prolific mobile technology users. Also, as technology becomes cheaper and more readily available, the number of students who use mobile technologies is increasing at a rapid rate. As such, many students have become more adept and competent in using a variety of mobile technologies while teachers are being left behind. Students have learned to use mobile technologies not just for communication and entertainment, but also for accessing information and knowledge, especially on the World Wide Web. In this context, SEAMEO INNOTECH developed MT4T—a multimedia and multitechnology Teacher Resource Kit—that can help educators enhance their skill and adeptness in using mobile devices as tools for professional development as well as teaching and learning.

The e-book, "An Introduction to Mobile Technology for Teachers," introduces what MT4T is. It provides detailed background information on the project and instructions for using the MT4T Portal and the e-books that make up the Teacher Resource Kit.

E-Book 2: An Introduction to Teachers' Personal and Professional Learning Networks for 21st Century Learning

PPLNs have been around for a long time. These originally included one's family, friends, and colleagues. Now, thanks to the development of web technologies and wireless connections, the concept has expanded to include people you have never even met before in person. Much of learning nowadays takes place online via a network of interconnected relationships through blogs and social networking websites such as Facebook, Twitter, and many others.

A PPLN is an informal learning network that consists of people who are connected by a common interest. It is a network of interrelated connections made for the purpose of discovering, collaborating, and sharing ideas and resources. These connections are created based on learning needs and can be made with like-minded people from all over the world.

The e-book, "An Introduction to Teachers' Personal and Professional Learning Networks for 21st Century Learning," teaches you on a high level how to get the most out of mobile device use for teaching and learning as well as enhancing your personal and professional growth aided by PPLNs. It also helps teachers fully develop HOTS as part of students' twenty-first century skills by equipping them with the necessary skills themselves.

Have you ever wondered how you can better teach lessons that you have been teaching for years? How often do you use modern technology to engage your students to improve their learning? It is amazing how technology has changed the world and given rise to new forms of education. Students are now more digitally focused than ever, and many spend more time using their mobile devices than they do studying. Technology and mobile device use actually provide several advantages when applied to education. The challenge, however, is maximizing their use to benefit yourself and your students.

E-Book 3: Uses and Functionalities of Mobile Devices

A vast majority (90%) of the mobile device users in Asia/Pacific access the Internet every day through their mobile devices.¹⁰ Mobile Internet is even more important for users in Southeast Asia where issues with the technology, cost, and infrastructure of traditional Internet access likely make mobile networks a more viable alternative. In fact, 52% of mobile device users in Southeast Asia and India access the Internet primarily via mobile devices. That is why it is only fitting for teachers who would like to build their PPLNs to learn all about mobile device use.

In this e-book, you will learn what mobile devices and apps are, how to use apps to enhance and grow your PPLN, how to make the most use of your mobile devices with the aid of cloud storage, and how your mobile devices and apps can aid in your teaching career.

The e-book, "Uses and Functionalities of Mobile Devices," discusses the various apps that you can use in teaching, promoting higher-order thinking skills (HOTS), and enhancing personal and professional growth.

¹⁰ "Mobile Internet use Picks Up in Asia-Pacific," *Marketer*, <u>http://www.emarketer.com/Article/Mobile-Internet-Use-Picks-Up-Asia-Pacific/1013752</u>

E-Book 4: E-Citizenship for Teachers

The e-book on cyberwellness and digital citizenship for teachers in Southeast Asia or simply, "e-Citizenship for Teachers," is meant to address cyberpollution. The e-book presents a brief background on the changing cyberspace of the region and the world, particularly how the youth use the Internet and mobile devices on a daily basis. It also discusses the common risks and opportunities of using mobile devices and other ICT tools, as well as the range of strategies to minimize risks and maximize opportunities. Through this e-book, teachers can stay abreast of issues on digital safety, security, and privacy. The strategies detailed in it can also be used to help learners, and even themselves, stay safe and responsible on the World Wide Web.

E-Book 5: Blogging for Teachers

Professional development can mean a number of different things to different teachers, including participating in district meetings, attending conferences, earning a master's degree, or networking with other education professionals on social media. These are all great options. However, an oft-overlooked way to expand and develop your teaching skills may be free, accessible to everyone, and right under your nose—starting a blog.¹¹

The e-book, "Blogging for Teachers," provides educators a means to learn from their professional idols and peers while teaching their students via their own blogs.

E-Book 6: Edmodo for Teachers

Edmodo, through "EdmodoCon," the world's largest online educational conference with more than 25,000 teacher and administrator participants from 170 countries, can let you enhance and grow your PPLN. "EdmodoCon" brings together Edmodo users, ranging from beginners to experts, to share thoughts and ideas, including best practices on using the platform for teaching and learning.

The e-book, "Edmodo for Teachers," focuses on Edmodo, which is a Web-based learning and social media platform designed for teachers, students, and parents. Edmodo provides a safe and easy way for members of a class to connect, collaborate, and share content with one another. It could also be used to access homework, grades, and school notices.

E-Book 7: Facebook for Teachers

Facebook has been making great inroads to education over the past few years. It has become part of students' everyday lives. As such, their online and offline lives have seamlessly molded with each other. To grow and enhance your PPLN, you have to be like your students. Make Facebook part of your daily life. You can take advantage of

¹¹ "10 Reasons to Blog as Professional Development," *Teach.com*, February 12, 2015. <u>http://teach.com/teach100-mentor/blogging-as-pd</u>

the social-networking website's features to promote collaborative learning, teach HOTS, and enhance your personal and professional growth.

The e-book, "Facebook for Teachers," teaches you all about Facebook, a socialnetworking website that allows registered users to create profiles; upload photos and videos; send and receive messages; and keep in touch with family, friends, and colleagues.

E-Book 8: Twitter for Teachers

Twitter provides many opportunities for crowdsourcing for research activities across sciences, social sciences, history, and literature. You can get people to help with data gathering, making observations, analyzing data, as well as transcribing and editing documents. Crowdsourcing is the process of getting work, usually online, from a crowd. It was coined from "crowd" and "outsourcing." The idea is to outsource work to a crowd, usually free of charge. Using Twitter for crowdsourcing presents novel prospects for research. You can interact with much larger audiences in a much more effective way. All you need to do is follow Twitter users and treat them as information sources while building up your own following—your PPLN on the platform. Twitter can cater to a wide range of interests, both academic and personal. Thousands of academics and researchers with varying levels of experience and across disciplines use Twitter on a daily basis. They connect and collaborate with followers.

The e-book, "Twitter for Teachers," teaches you all about Twitter, a social-networking and microblogging service that enables users to send and read text-based messages of up to 140 characters long, known as "Tweets."

E-Book 9: Annotated Resources for Teachers

The e-book, "Annotated Resources for Teachers," provides an annotated list of selected digital resources and tools, including Web links that you can use for twenty-first century teaching and learning, particularly in promoting HOTS and enhancing your PPLN.

Chapter 9

Twenty-First Century Learning Skills

One of the user goals of the MT4T e-books is to help teachers to develop 21st century teaching and learning skills. This includes helping their students to enrich their higher order thinking skills (HOTS).

The MT4T Toolkit contains a collection of teaching-learning resources that use mobile technologies as tools to encourage HOTS development in both teachers and students. It does so by exploring how emerging social media provide opportunities for fostering inquiry, curiosity, discovery, constructive critique, reflection, problem-solving, critical analysis, and creative thinking. The internet-based universe, which is accessible via mobile technologies, is viewed not merely as a reservoir of information/data to enrich traditional print-based teaching-learning resources, but as an opportunity for expanding the social process of learning through interaction and constructive engagement. The opportunities for social learning provided by tools such as blogs, Facebook, and Twitter, reinforce the constructivist view of a teacher as an initiator, facilitator, and synthesizer of learning, rather than simply the repository of knowledge and wisdom. Accordingly, this should inspire you to continuously explore opportunities for using mobile technologies to promote active learning as part of your own personal and professional development and the learning of your students through the following:

Initiation – Thinking is stimulated by posting an idea or learning object. This might be a photo, a blog post, a file upload, an e-discussion question, a web link, a tweet, or an SMS message, which requires analysis, reflection, inquiry, and commentary, either individually or in groups. Such learning objects become triggers for thinking that requires the use of existing knowledge and experience to explore the unknown and new lines of inquiry and discovery.

Conversation – Once an idea is initiated, the next step is to engage in a discussion to generate and share ideas, commentary, or feedback, and make further inquiry. The various modalities of social media accessible via mobile devices provide countless opportunities for such conversational engagement in real time. From the constructivist view of learning, knowledge is individually constructed and socially co-constructed by students based on their interpretations of experiences in the world. Allowing learners to engage in conversations by letting them share their ideas, opinions, feedback, experiences, and contributions, as well as letting them reflect, make students become experts based on their own experiences. Thus, each one becomes a mentor and a learner at the same time. For you teachers, this means mastering

the art of questioning and reacting to stimulate intellectual exchange of ideas and encourage students to inquire and explore independently.

Inquiry – By providing real-world authentic inquiry-oriented activities and integrating mobile technology tools, students get the chance to use real-world applications in finding, evaluating, and synthesizing information from a variety of sources.

Collaboration – Conversations anchored on focused points of inquiry and deliberation can be channeled to become the essential ingredients of critical and creative cooperative problem solving and innovation. Facebook, Twitter, blogs, Skype, and other social media are powerful platforms for such collaborative dialogue and discussion among teachers, students, and other learning community members. The active exchange of ideas within small groups not only increases interest but also promotes critical thinking. According to Johnson and Johnson (1986), there is persuasive evidence that cooperative teams achieve higher levels of thought and retain information longer than students who work quietly as individuals. The shared learning gives students an opportunity to engage in discussions, take responsibility for their own learning, and thus, become critical thinkers (Totten, Sills, Digby, & Russ, 1991). For teachers, social media provide exciting opportunities for building collaborative professional learning communities for sharing of ideas, best teaching-learning practices and collaborative problem solving of real-life teaching challenges.

Critical Analysis – Throughout the process of collaborative dialogue mediated by social media, teachers and students are encouraged to deconstruct and differentiate ideas into constituent parts, relate concepts, draw comparisons, evaluate assumptions, identify contextual variables, determine relationships, and propose scenarios as they wrestle with solving real life problems and determining alternative solutions and options. For you, teachers, this also means building these capacities of critical evaluation in your students and yourselves, which is an essential 21st century skill to discern what is truth from non-truth as you navigate the plethora of available digital contents.

Synthesis – Social networking tools like Facebook and Twitter are open media forms with thousands of posts, likes, tweets, and comments. The challenge for you as educators is to facilitate synthesis of key learning points amidst this mountain of information within the context of set curricular learning outcomes. This includes acting as synthesizers to mentor your students in sifting through information, as well as guiding them to create new constructs of meaning from their social learning experience. Ultimately, the outcome of this synthesis should be the ability to take what was learned and apply it to new situations and contexts.

Creation – Out of critical analysis and synthesis, new ideas may evolve and new lines of inquiry and discovery may be stimulated. Through the use of social media for collaborative inquiry, you may nurture opportunities for creative thinking and innovation both among your fellow educators and your students.

To fully develop HOTS as part of students' 21st century learning skills, you should also be concerned about equipping yourselves with the necessary twenty-first century teaching skills. As teachers, have you ever wondered about a better way to teach lessons that you have been teaching for years? How often do you use modern technology to engage your students to improve their learning? It is amazing how technology has changed the world and given rise to new forms of education. Students are now more digitally focused than ever, and many spend more time using their mobile devices than they do studying. Technology and mobile device use actually provide several advantages when applied to education. The challenge, however, is maximizing their use to benefit yourself and your students.

What Are the Characteristics of Twenty-First Century Educators?

According to "Eight Habits of Highly Effective 21st Century Teachers"—a reprint by <u>EDGE21</u> of an article written by Andrew Churches for the New Zealand Interface Magazine, the following are important characteristics that today's teachers must have in order to respond and adapt to the rapidly changing teaching-learning environment:

- Adapting. The twenty-first-century educator must be able to adapt the curriculum and requirements to teach it in more imaginative ways. As educators, you must be able to adapt software and hardware designed for businesses as tools for teaching a variety of students of different age groups with varying abilities. You must also be able to adapt to a dynamic teaching experience. When all goes wrong in the middle of a class or when technologies fail, the show must go on. You need to continue and respond appropriately to this interruption.
- **Being visionary.** Imagination is a crucial component of educators today and tomorrow. As an educator, you must look across disciplines and through curricula. You must see the potential in emerging tools and Web technologies, and grasp and manipulate them to serve your students' needs. If you look at currently emerging technologies, how many were developed for education? Teachers with a vision can look at others' ideas and envisage how they would use these in their own classes.
- **Collaborating.** As an educator, you must be able to leverage collaborative tools (blogs, wikis, social networking websites, games, etc.) to enhance and captivate your learners. As collaborators, you should be able to share, contribute, adapt, and invent.

- **Taking risks.** There is so much to learn. How can you, as an educator, know all of these things? You must take risks and sometimes surrender yourself to your students' knowledge. You must have a vision of what you want and what technology can achieve; identify goals and facilitate learning; use the strengths of digital natives to understand and navigate new products; and have them teach one another. Trust your students.
- Learning. Expect your students to become lifelong learners. You must continue to absorb experiences and knowledge as well. You must endeavor to stay current. Do not rely on the lessons and unit plans you prepared five years ago. You must learn and adapt as the horizons and landscapes change.
- **Communicating.** In order to get "anytime, anywhere learning," you must be anywhere and anytime. The twenty-first century teacher is affluent in tools and technologies that enable communication and collaboration. You should go beyond learning just to do it; you should also know how to facilitate learning; stimulate and control it; and moderate and manage it.
- **Modeling behavior.** Teachers are expected to teach values, so be the model of the behaviors you expect from your students. As their teacher, you are the most consistent part of their lives, seeing them more often and longer than even their parents. As a twenty-first century educator, you must model tolerance, global awareness, and reflective practice, whether through quiet, personal inspection of your teaching and learning or through blogs, Twitter, and other media. Effective educators look both inward and outward.
- Leading. Whether you are a champion of information and communication technology (ICT) integration or a quiet technology coach, the twenty-first century educator is a leader. Like clear goals and objectives, leadership is crucial to the success of any project.

De Bono's Six Thinking Hats¹²

The *Six Thinking Hats* developed by Edward de Bono is a useful tool for encouraging critical and creative group decision and individual thinking. It is based on the premise that we can program our brain to think in a structured way, thus enabling us to develop strategies for thinking and making decisions about a specific issue. According to De Bono, some of us differ in the way we think. There are those who would think from a rational and positive viewpoint and those who would consider problems and issues from the emotional, intuitive, creative or negative viewpoints that make them resistant to change. There are also others who would look at problems from a pessimistic viewpoint or from a very logical perspective that may make them highly defensive or suspicious that stifle their creativity or make them ignore their intuition.

¹² SEAMEO INNOTECH. GURO21 Module 2. Developing Higher Order Thinking Skills (HOTS) in Learners.

You can use the Six Thinking Hats to improve the problem solving and decisionmaking process of your learners and also practice them to reflect on their thinking process. Asking your learners to "wear" a particular color of a Hat as you steer them to the thinking process specific to a color of the Hat enables them to think more effectively as well as plan their thinking process more systematically.

The table below shows the particular thinking state each color represents, although the colors are just metaphors:

De Bono's Six Thinking Hats		
Hat	Thinking State	Possible Outcomes
White	Questioning	Available information
	Seeking	Gaps to be filled in or considered
	information	Analysis of past trends, inferences from
		historical records
		Other data/information gathered
Black	Pessimistic,	Ideas that may not work and their
	defensive, cautious	reasons
	Bad points	Highlighted weak points
	judgment	Flaws and risks involved prior to a
	• Playing the devil's	decision
	advocate	Alternative approaches to counter
		potential risks and problems
Green	Creative	Possible creative solutions
		Solutions accepted without or with
		little criticisms of ideas, and if possible
		positive criticisms only
Yellow	Optimistic	Benefits and values of a decision
	Giving judgments	Good spirits kept when things look
	based on good	gloomy
	points	
Blue	Process control	Conclusions, decisions arrived at using
	Thinking about	rationalization, logic and intellect
	thinking	Overview of the conclusions or
		decisions arrived at
		Focuses on "thinking" about
		(metacognition), rather than on the
		situation or process itself

De Bono's Six Thinking Hats

One way of using the Six Thinking Hats in your class is to create a situation or a problem and ask your learners to arrive at a decision or solve the problem to facilitate the development of HOTS. You can divide the class into subgroups and assign them different colors of the hats for their thinking process. Here is a sample situation:

You are planning an educational trip for your class. Instead of doing the planning yourself, you involve the whole class to arrive at a decision. You give them two options: going to a hill resort to learn more about tea cultivation, or going to an island fishing village to see how fishermen make a livelihood from catching fish. You provide the following additional information for them to work on: The hill resort is situated 200 kilometers away, whereas the island is 100 kilometers away. However, to reach the island, they have to take a ferry. You remind the class that your school has very limited fund for this activity, although the school bus is available to take them to and from whichever venue they would choose.

You may be surprised at the questions your learners will come up with. For those assigned using the white hat, they might ask: "Will the field trip be just a day trip or would it allow us to stay overnight?" "Will we be allowed to visit other places, such as the cactus farm and the rose garden also situated at the hill resort?" or "Can we go out on a fishing boat to see how fishermen catch fish?"

Given the above questions, you need to guide your students towards your expected possible outputs using the white hat. If possible, they need to undertake some research or data gathering to come up with answers to their questions. Using a social media platform, such as Edmodo, you can send that sub-group a direct message of some of the possible questions you expect their group to ask. This would include the following: What are the available amenities in the hill resort? Have there been previous field trips to this resort by classes in our school or other schools, and what were their experiences and ratings for this resort?

You can do the same for the other groups you assigned different colors to. As a culmination of this exercise, you can ask them to share their experiences as they use different colors of the hats to guide them in their thinking process.

Chapter 10 Conclusion

PPLNs are based on the concept of forming learning communities where educators, including teachers like you who are passionate about developing their learning experiences, recognize the value of sharing experiences, knowledge, and expertise with others. A PPLN's members constantly seek out learning settings or places where they can exchange information. These like-minded people who continuously secure and seek information become a learning community. PPLNs are important not only in education, but also in personal and professional development.

The MT4T Teacher Resource Kit carries a rich source of resources to help you get the most out of your mobile devices in order to better teach and develop your PPLN. All MT4T e-books—"An Introduction to Mobile Technology for Teachers for 21st Century Learning," "Using Mobile Devices to Develop Teachers' Personal and Professional Learning Networks," "Uses and Functionalities of Mobile Devices," "Facebook for Teachers," "Edmodo for Teachers," "Twitter for Teachers," "Blogging for Teachers," "Annotated Resources for Teachers," and the e-book on "E-Citizenship for Teachers" which talks about cyberwellness and digital citizenship—can be accessed and downloaded from the <u>MT4T website</u>.

Try to read all of the e-books and follow the step-by-step directions provided until you become adept at using social networking sites. Once you become tech savvy, go beyond using these SNS for personal gain by applying the suggestions found in the "Advanced Users" and "Experts Users" sections so you can further enhance your professional development and growth as an educator in the 21st century. In the process, you also help your students develop 21st century skills and acquire higher order thinking skills. Don't let the chance to broaden your PPLNs pass you by. Start your own blog, and actively participate in PPLN platforms like the MT4T website as you connect, collaborate, and share your thoughts and ideas with other education professionals around the world. As you do all these, don't forget to have fun in the process.

References

"A Simple Comprehensive Guide on the Use of Personal Learning Networks in Education," which can be accessed at <u>http://www.educatorstechnology.com/</u>2012/06/simple-comprehensive-guide-on-use-of.html, provides a simple and complete guide to using PPLNs in education.

"How Technology Helps You Build a Personal Learning Network," which can be accessed at <u>http://www.careerealism.com/how-social-media-build-personal-learning-network/</u>, shows how technology helps you build PPLNs.

"Nine Themes of Digital Citizenship," which can be accessed at <u>http://digitalcitizenship.net/Nine_Elements.html</u>, identifies nine elements that make up digital citizenship.

"Internet Ethics and Netiquette," which can be accessed at <u>http://www.Internet-guide.co.uk/netiquette-guide.html</u>, provides a guide to Netiquette.

Glossary of Terms

Knowing the following terms can help you better understand and use the e-books in this Kit:

- Android: A mobile phone OS developed by Google, which is available for free.
- **Blog:** Also known as an "online personal journal" or an "online diary."
- **Collaboration:** Occurs when two or more people work together on an idea or a project.
- Web Conference: A meeting between two or more people to discuss a topic via the Internet.
- **Digital citizenship:** Safe, responsible, critical, and proactive use of modern technology.
- **E-book:** Like a printed book except that it is published in an electronic format online (can contain videos, audio files, animated resources, and images). An e-reader app is required to read an e-book.
- **Edmodo:** A service dedicated for the use of teachers, students, and parents to facilitate teaching and learning.
- Educational resource: A repository of teaching and learning materials.

- **E-mail:** Like traditional mail sent via post except delivered online. It reaches recipients way faster and can contain audio files, videos, documents, and other materials. Access to the Internet is required to send and receive e-mails.
- **E-reader app:** An electronic software program used to read e-books. An e-book cannot be read without it. SEAMEO INNOTECH has developed its own e-reader app for the MT4T and it can be used for all mobile platforms and is available for free.
- **Facebook:** A popular social networking website that lets registered users create profiles, upload photos and videos, and send messages to keep in touch with family, friends, and colleagues for free.
- Forum: Like a message board, people can send or reply to a post here.
- **HOTS:** Skills required to think at a higher level, so you do not just restate facts. These require doing something with a fact—understanding, making a connection, categorizing, manipulating, putting together in a new or novel way, and applying to seek new solutions to problems.
- **Internet:** A massive public spiderweb of computer connections that allows information sharing to everybody connected to it.
- **iOS:** A mobile OS developed and distributed by Apple Inc.
- **Mobile app:** A computer program designed to run on a smartphone, a tablet, or any other mobile device.
- **Mobile device:** A handheld device that is made for portability. It is both compact and lightweight. New data storage, processing, and display technologies allowed it to do nearly anything previously done with larger PCs.
- Mobile features: Capabilities, services, and functions found on a mobile device.
- **Mobile platform:** Also known as "mobile OS," refers to a set of computer programs designed to run on a handheld device.
- **MT4T Portal:** The website that serves as MT4T's information hub. It will gradually evolve to become an online repository of e-books and updates regarding the project.
- **Netiquette:** The way of communicating with others on the Internet.
- **Podcast:** A digital media file (audio and/or video) usually produced as part of a series.

- **PPLN:** An informal learning network that consists of people who are connected by a common interest.
- **SMS:** A system that enables mobile phones to send and receive short text-based messages.
- **Social media:** A set of tools that promotes interaction, discussion, and collaboration by allowing people to build relationships and share information with others. Examples of these include Facebook, LinkedIn, Twitter, and others.
- **Social-networking website:** A website that people use to socialize with; send messages to; share interests and information with; meet; and post information, photos, and videos for others.
- **Streaming media:** Multimedia constantly received by and presented to users by a provider. "To stream" refers to the process of consuming various media.
- **Twitter:** A social networking website that lets users send and read text-based messages of up to 280 characters known as "Tweets." You do not need a phone number to send a Tweet but you do need an Internet connection.
- **Webcast:** A media presentation distributed over the Internet using mediastreaming technology. This technology simultaneously distributes a single piece of content to many viewers or listeners. Webcasts can be distributed live or on demand. Essentially, webcasting is broadcasting over the Internet.
- Web conference: A meeting between two or more people to discuss a topic via the Internet.
- Webinar: A seminar conducted over the Internet.
- Windows: An OS developed by Microsoft.

This e-book comprises two distinct parts. Part 1 provides an introduction to personal and professional learning networks for teachers and how such networks can be initiated, expanded, and sustained using mobile devices, collaborative apps, and social media. It focuses on teaching educators to use mobile devices in order to develop personal and professional learning networks (PPLNs).

Part 2 of the e-book focuses on twenty-first century teaching and learning. It introduces teachers to the characteristics of twenty-first century educators and provides an overview of Edward de Bono's Six Thinking Hats as a tool to facilitate critical and creative thinking.

SEAMEO INNOTECH invites you to take part in our initiative to equip teachers like yourself with skills and knowledge on technology relevant to education in the 21st century. You may contribute by sending in new resource you find useful online through our MT4T live web forum at <u>www.seameo-innotech.</u> <u>org/mt4t</u>. Your support will help ensure that this FREE e-book on **Teachers'Personal and Professional Learning networks for 21st Century Learning** will continue to grow and expand.



Mobile Technology for Teachers (MT4T) is a project of the Southeast Asian Ministers of Education Organization Regional Center for Educational Innovation and Technology. Learn more about the project, access its FREE resources, and stay up-to-date through the following:

> http: www.seameo-innotech.org/mt4t SEAMEO INNOTECH Reader Mobile app http://www.facebook.com/mt4tproject