



## **MT4T: MOBILE TECHNOLOGY FOR TEACHERS**

A Teacher Resource Kit Using Mobile Technology for 21<sup>st</sup> Century Learning in Southeast Asia





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# MT4T Main eBook

### *Acknowledgement*

In the development of this Teacher Resource Kit, we have relied on a variety of valuable experts and resources. Every effort has been exhausted to provide proper credit to sources. If any sources were omitted, please notify us for acknowledgement in future publications.

### *(Disclaimer)*

This Teacher Resource Kit contains links to third party websites that are not under the control of SEAMEO INNOTECH. The Center is not responsible for the contents of any linked site, including links contained therein, and any changes or updates to such sites. In addition, while the web links contained in this Main eBook and the six (6) sub-eBooks are active as of first publication, third party sites may experience name and server changes, page content changes, or remove pages without warning, causing broken links and missing files.

Take note also that the mobile devices used to illustrate lessons in this Teacher Resource Kit are the Samsung Galaxy S III, iPhone 5, and Nokia Lumia 920. SEAMEO INNOTECH is not in any way endorsing these mobile devices, nor does it have a partnership with the manufacturer of each mobile device. The devices were chosen based on their popularity at the time this Teacher Resource Kit was being developed. On the other hand, the versions of applications used here are specified in each sub-eBook.

## Introduction

Welcome to the MT4T: Mobile Technology for Teachers. MT4T is A Teacher Resource Kit Using Mobile Technology for 21<sup>st</sup> Century Learning in Southeast Asia. The Teacher Resource Kit contains information, resources, examples, and best practices in using mobile technology for personal and professional growth. The MT4T project, while recognizing there is a wide array of mobile technology, is focused primarily on smartphones and tablets. Further study is needed to address the use of JAVA-based phones in the future projects of the Center.

### About MT4T: Mobile Technology for Teachers

MT4T is designed to provide teachers with easy access to knowledge on the use of mobile technology for personal and professional growth. It provides a basic guide on how to use mobile devices beyond sending Short Messaging Service (SMS) or texting and calling. It also provides teachers with basic understanding and uses of the three most popular mobile platforms—iOS, Android, and Windows. Built-in applications are included to make full use of available mobile applications, as well as samples expanding the functionality of mobile devices. Social networking is also explored to develop collaboration among teachers in Southeast Asia and beyond.

Unique to this Teacher Resource Kit is the use of mobile technology to promote higher order thinking skills (HOTS) and values. Links to teaching-learning resources that promote HOTS are provided. Learning issues of the 21<sup>st</sup> century such as netiquette and global citizenship are also part of this Toolkit.

### Rationale

SEAMEO INNOTECH, in fulfilling its mandate as the Regional Center for Educational Innovation and Technology, developed a validated Competency Framework for Southeast Asian Teachers geared towards 21<sup>st</sup> Century competencies and challenges. As part of the validation process, a learning needs assessment was conducted in coordination with Ministries of Education of SEAMEO member countries to rank the competencies in terms of their importance, frequency of application, and degree of training needed to prepare their teachers for their role as 21<sup>st</sup> Century knowledge workers and learning facilitators.

Competencies that ranked highest were focused on developing HOTS and facilitating 21<sup>st</sup> century teaching and learning. As a result, the Center developed two flexible learning courses addressing the two competency areas for a new online teacher capacity building program known as “Gearing Up Southeast Asian Teachers for the 21<sup>st</sup> Century,” or GURO21.

During the course development and the pilot implementation of GURO21 in early 2012, many Southeast Asian teachers identified a dimension of 21<sup>st</sup> century learning where they would need additional support. This dimension was on how mobile learning

technologies can be effectively used to promote HOTS, and enhance teachers' personal and professional development, as well as the learning journey of their students.

Recent studies, researches, projects, and applications have focused more on the use of mobile technologies by students and it was noted that teachers were being left behind. As a matter of fact, there is now an emerging divide between students as "digital natives" and teachers as "digital migrants." This is due to the fact that students are more prolific users of mobile technologies and as technology becomes cheaper and easily available, the number of students using mobile technology is increasing at a great rate. In this manner many students are more adept and competent in using a variety of mobile technologies, not just for communication and entertainment, but also for accessing information and knowledge especially from the World Wide Web.

In this context, SEAMEO INNOTECH developed this multi-media and multi-technology resource kit for teachers to enhance their skills and adeptness in the use of mobile devices as tools for professional development, and as a teaching and learning technology in the classroom. It is designed to enrich their perspectives on the many uses and possibilities of mobile technology.

### MT4T Objectives

Funded under the SEAMEO INNOTECH Regional Education Program (SIREP), the overall objective of MT4T is to enrich the perspectives of teachers on the many uses and possibilities of mobile technology for enhancing their own 21st century skills, their adeptness in using mobile technologies for their own personal needs, as well as using it as a basic tool for communicating and for teaching and learning HOTS.

In particular, teachers will learn more about the following uses and applications of mobile technologies:

- use blogs for reflective thinking, sharing of ideas and best practices, and communicating with fellow teachers and their students;
- access YouTube resources for their own professional growth and for promoting HOTS through improved teaching and learning methodologies;
- access digital libraries of photos and graphic images that promote 21<sup>st</sup> century skills, especially HOTS, as well as generate their own digital libraries using built-in camera available in most mobile devices, within the context of Southeast Asia;
- utilize the many features of mobile devices to enhance teaching and learning of HOTS, like the use of thought-mentally stimulating graphics/pictures/ images, and use of presentation software, audio and video recording, collaborative file sharing, and problem-solving;
- use social networking media, such as Facebook, Twitter, and blogs for connecting with other educators; creating a learning community of SEA teachers; and as a learning tool for students;



- share links to online resources regarding HOTS, including access to virtual educational tours;
- use video and audio features of mobile devices to develop locally generated supplementary instructional materials, and as a learning tool;
- access available free mobile education-related applications that might be used to promote 21<sup>st</sup> century skills;
- generate digital portfolios for themselves and their students; and
- generate innovative ideas for other uses of mobile devices by Southeast Asian teachers.

### MT4T Key Concepts and Themes

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 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 21<sup>st</sup> century skills to discern what is truth and 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 how 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 stimulated. Through the use of social media for collaborative inquiry, you may nurture opportunities for creative thinking and innovation both amongst your fellow educators and your students.<sup>1</sup>

1 Based on ideas shared by Jason dela Rosa (2013) of Virtual Pisara in his blog at <http://virtualpisara.com>

## 21<sup>st</sup> Century Teaching Skills

To fully develop HOTS as 21<sup>st</sup> century skills among students, you should also be concerned about equipping yourselves with 21<sup>st</sup> century teaching practices and skills involved in this process. As teachers, have you wondered about a better way to teach some lessons that you have already delivered in class? How often have you used technology to engage your students to improve learning? It is amazing how technology has changed the world and gave rise to new forms of education. Students are now more digitally focused than ever, and many spend more time engaged in their mobile devices than they do with their studies. Technology and mobile devices actually provide several advantages as used in education. The challenge, however, is how you can maximize these technologies and mobile devices to benefit yourselves and your students, as well.

## 21<sup>st</sup> Century Characteristics of Educators

The following 21<sup>st</sup> century characteristics of educators taken from the *Eight habits of highly effective 21<sup>st</sup> century teachers*<sup>2</sup> defined some of the important characteristics that present day teachers must have to be able to respond to the rapidly changing teaching-learning environment.

**Adapting** – The 21<sup>st</sup> Century educator must be able to adapt the curriculum and the requirements to teach the curriculum in imaginative ways. As educators, you must be able to adapt software and hardware designed for a business model into tools to be used by a variety of age groups and 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 the disciplines and through the curricula. You must see the potential in emerging tools and web technologies, grasp these and manipulate them to serve your students' needs. If you look at technologies currently emerging, how many are developed for education? Teacher with a vision can look at others' ideas and envisage how they would use these in their class.

**Collaborating** – As an educator, you must be able to leverage collaborative tools (Blogger, Wikispaces, Bebo, MSN, MySpace, Second life Twitter, RSS) to enhance and captivate your learners. As collaborators, you should be able to share, contribute, adapt, and invent.

**Taking risks** – There's so much to learn. How can you, as an educator, know all these things? You must take risks and sometimes surrender yourself to the students' knowledge. You must have a vision of what you want and what the technology can achieve; identify goals and facilitate learning; use the strengths of the digital natives to understand and navigate new products; and have them teach each other. Trust your students.

2 [www.nz-interface.co.nz/article.cfm?c\\_id=10&id=28](http://www.nz-interface.co.nz/article.cfm?c_id=10&id=28) accessed 5/12/14

Learning – Expect your students to be 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 prepared some five years ago. You must learn and adapt as the horizons and landscapes change.

Communicating – In order to have “anytime, anywhere learning,” you must be anywhere and anytime. The 21<sup>st</sup> 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 21<sup>st</sup> century educator, you must model tolerance, global awareness, and reflective practice, whether it’s the quiet, personal inspection of their teaching and learning, or through blogs, Twitter, and other media. Effective educators look both inwards and outwards.

Leading – Whether they are a champion of the process of ICT integration or a quiet technology coach, the 21<sup>st</sup> century educator is a leader. Like clear goals and objectives, leadership is crucial to the success or failure of any project.

## Technical Conceptual Framework

MT4T is designed to be utilized by all Southeast Asian teachers using smartphones and tablets. For this purpose, an eReader was developed so teachers can access eBooks from their mobile devices without compromising format and style. The eReader is available in Apple tablets (running on iOS 6 or higher), android tablets and smartphones (running on Jelly Bean 4.1 or higher), and Windows tablets and desktop computers (running on Windows 8.1). The eReader currently does not support devices other than those mentioned. In order to make the MT4T Toolkit more accessible, PDF versions of all MT4T modules are made available in the web portal for downloading to any device.

MT4T is also designed to accommodate four classifications of users: basic users, intermediate users, advanced users, and expert users as adopted from UNESCO’s Model on ICT Integration in Education (Emerging, Applying, Transforming, and Infusing). A brief description of each class of user is provided below:

Basic Users – those who have little or no knowledge in using mobile technology for their personal and professional growth. The interpretation of little or no knowledge in this particular project refers to those users who use their mobile devices mainly for making calls and sending SMS message.

Intermediate Users – those who have been using their mobile devices for searching and browsing the internet, checking their emails, and using social networking for personal growth.



Advanced Users – those who have been using their mobile devices to do administrative tasks through word, spreadsheet, and presentation tools. They use their mobile devices for accomplishing professional tasks. They use mobile applications for teaching, collaborating, reaching out to friends, and connecting to other professionals on the web.

Expert Users – those who, apart from using their mobile devices as instructional tools, use these also to create content, such as eBooks, and teaching and learning materials.

## **The MT4T Portal**

The Teacher Resource Kit includes a web portal known as the MT4T Portal that can be accessed through this url: [www.seameo-innotech.org/MT4T](http://www.seameo-innotech.org/MT4T). Through this portal, you can download to your mobile devices various teaching and learning resources. One of the eBooks contains links to annotated resources that give a brief introduction and guides on how the resources can be used to develop HOTS. All resources in the portal are available for further review and for application as you see fit.

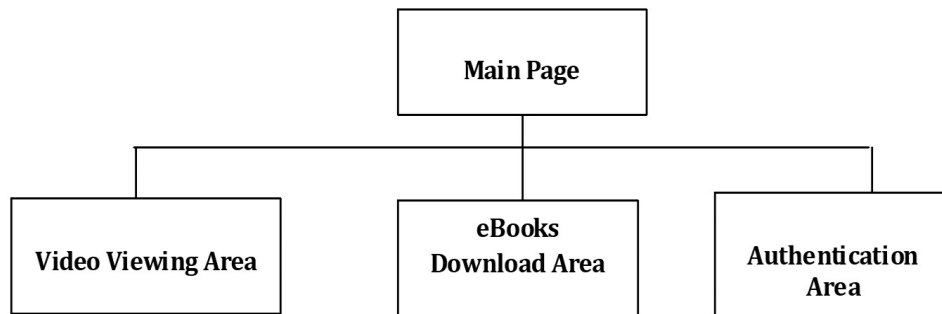
The MT4T Portal serves as a gateway to the MT4T: Mobile Technology for Teachers Resource Kit, or simply MT4T. The full project title for MT4T is A Teacher Resource Kit Using Mobile Technology for 21<sup>st</sup> Century Learning in Southeast Asia. The portal links teachers to the eReader and the eBooks. It serves as a transition point from the use of desktop computers to the use of mobile technology for teachers' personal and professional growth.

The MT4T Portal serves as a monitoring instrument for teachers who have undergone training in MT4T when they log in to report progress on the use of the Toolkit. It also serves as a platform to collaborate with other teachers who have undergone the MT4T training.

The MT4T Portal is integrated in SEAMEO INNOTECH's main website and in the iKNOW (INNOTECH Knowledge Network and Open Web), which is SEAMEO INNOTECH's main hub for sharing and disseminating its body of knowledge. The Portal also provides a mechanism to accommodate questions, inquiries, suggestions, and feedback. Simply send your message to the email address ([info@seameo-innotech.org](mailto:info@seameo-innotech.org)) found at the bottom of the main page.

Figure 1 presents the diagram of the MT4T Portal.

Figure 1: MT4T Web Portal Conceptual Framework



## Main Page

This is the first page that you will see when you open the MT4T Portal. It is divided into three areas:

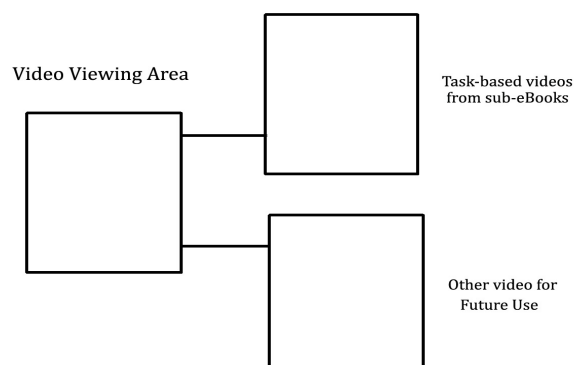
- video viewing area;
- download area; and
- authentication area.

## Video Viewing Area

This where you can play videos. Available videos are listed just below the video frame. The video frame contains basic functionalities, such as pause, play, and stop. You can choose what video to play in a scrolling pane. Once you tap or click the title of a video, it will start automatically.

Figure 2 is the diagram flow of the Video Viewing Area.

Figure 2: Video Viewing Area Diagram Flow



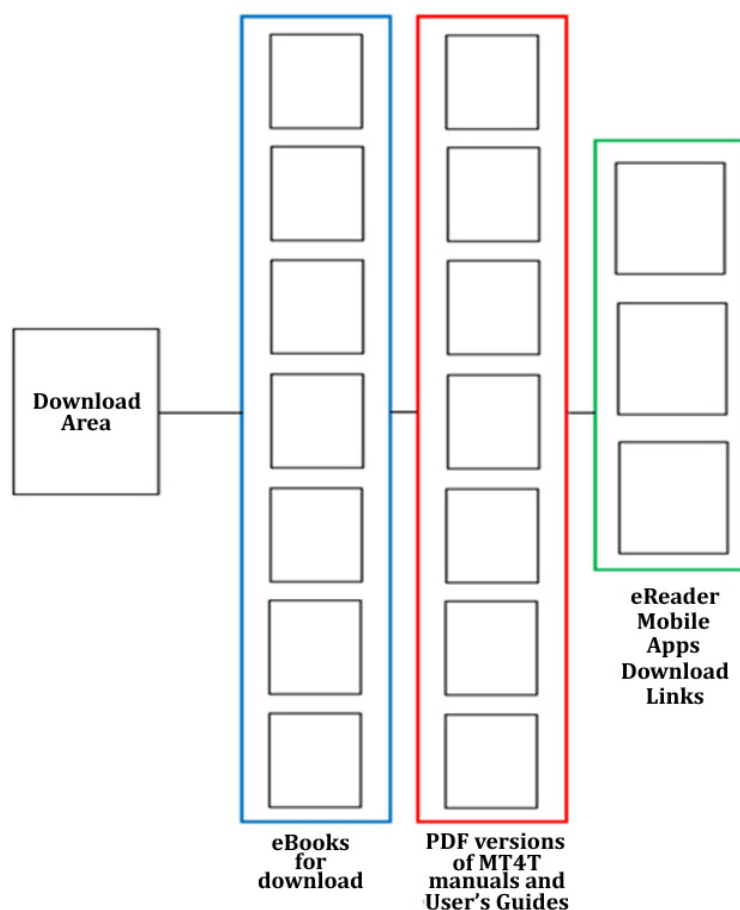
The Video Viewing Area serves as the video player of videos contained within the portal. Here you will find a list of videos to play, such as the task-based videos from the sub-eBooks. You can scroll down to view the complete list of available videos. A sample frame is given to give you a brief preview of what a video is all about. Remember to use the stop, pause, or exit tools to control your video viewing. All videos in the portal have subtitles in English.

## Download Area

This area contains all downloadable files in the MT4T Portal. This is where you can download the eBooks, the User's Guides, and the PDF versions of the MT4T manuals. While the Teacher Toolkit has its own eReader, which you can download, also available are eReader apps for different mobile platforms. (eReader for iOS can be downloaded from Apple site; eReader for Android can be downloaded from Google Play; and eReader for Microsoft Windows 8.1 can be downloaded from Microsoft Store.) Right now, there are seven eBooks that you can download. More eBooks will be added as the project progresses. When you tap on an eBook, a short description of that eBook appears. Another tap loads the eBook on full screen mode and a download button also appears. Occasionally, check the area for the latest materials that you can download.

Figure 3: Download Area Diagram

Figure 3 presents the Download Area Diagram.

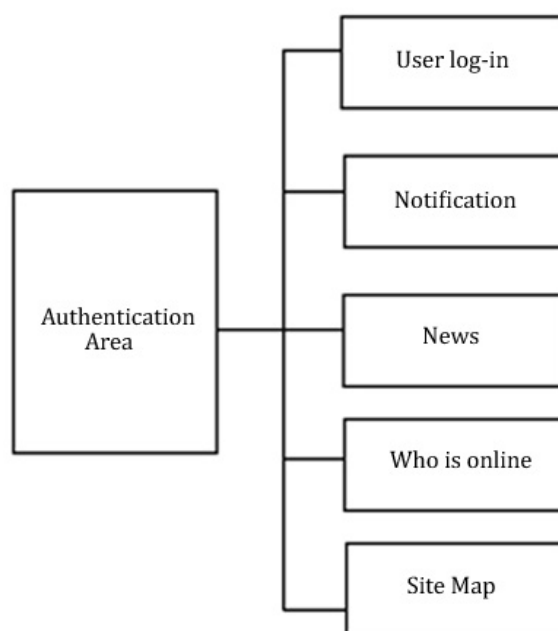


## Authentication Area

This contains the log in portion of the website. News, notifications, and the names of those who are currently logged in are visible in this area. It also contains statistics on log-ins to the portal—from current logs to past logs according to days, weeks, and months. A site map is also available to guide you on how to navigate through the web portal.

Figure 4 presents the diagram for the Authentication Area.

Figure 4: Authentication Area Diagram



It is necessary to log in before you can access downloadable materials, and post any news. You can also view notifications only after you have logged in. The notices are important as these tell you about on-going and upcoming activities, such as webinars, podcasts, webcasts, online meetings, and others that you may find useful or be interested to take part in. Included in the authentication area is an administration-specific notification that allows certain users to post notifications.

All authenticated users can post short stories on how they are using mobile technology for their personal and professional enhancements, as well as in their classrooms, especially with regard to developing HOTS. Please note, however, that the site administrator has the option to edit or delete postings for the purpose of maintaining netiquette within the portal.

Once you have logged in, you should be able also to see who are online and you can chat or invite them for a video conversation. The site administrator, on the other hand, is the only person who can view relevant statistics, like the number of users who are logged in for a certain period, and generate a report based on these logs.

The Site Map is available if you want to read more about MT4T and be guided on how to use the portal. A User's Guide in eBook format is also found in this area.

## **MT4T eBooks**

MT4T initially comprises a Main eBook, and six sub-eBooks. The Main eBook introduces users to the MT4T Project, the technical conceptual framework of the Teacher Resource Toolkit, and the key MT4T concepts and themes. The Main eBook also introduces users to the notion of a teacher's personal and professional learning network as a foundation for maximizing use of mobile technology by teachers.

The six sub-eBooks cover the following topics:

- Uses and Functionalities of Mobile Devices
- Facebook for Teachers
- Edmodo
- Twitter for Teachers
- The Teachers' Use of Blogs (LinkedIn)
- Annotated Resources for Teachers

Each sub-eBook has been written specifically to suit four levels of users mentioned, providing rich resources for personal and professional growth. Contained in the eBooks is a series of task-based videos that explain the different tasks that you will perform. The eBooks aim to develop skills, knowledge, and values in the use of mobile technology, not just for teaching and learning but also for personal and professional use of teachers like you.

The Main eBook introduces other tools that you can use in building your own personal and professional learning networks. Some of these tools are the email, Skype, Yahoo Messenger, chat, and FaceTime. These are discussed further in the succeeding sections of this eBook.

*What is a teacher's personal and professional learning network (TPLN)?*

A personal and professional learning network is an informal learning network consisting of people who are connected to 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 around the world.



Personal and professional learning networks (PLNs) have been around for a long time. Originally these include your family, relatives and friends, or probably other educators and fellow teachers you worked with in the same institution. Now, thanks to the development of web technologies and wireless connections, the concept of PLNs has expanded to include people whom you have never met before in the real world. Much of the learning nowadays takes place online and via a network of interconnected relations through blogs, photo stories, and social networking sites like Facebook, Twitter, and many others.

### *What's in it for me?*

PLNs are based on the concept of a learning community, in which educators, such as teachers like you who are passionate about developing their learning experiences, recognize the value of sharing experiences, knowledge and expertise with others. PLN members constantly seek out learning settings or places in which they can exchange information. These like-minded people who continuously secure and seek information become a learning community. PLNs have a great importance not only in education but in personal and professional development, as well.

Through a personal and professional network, you can instantly and easily search, find, and share information with colleagues and friends. This means you can be constantly in touch day and night. As a teacher, you can learn from the expertise of other experienced teachers. This broadens your network of connections and enables you to get to know other cultures and make professional connections around the world.

### *Why should I use TPLN?*

A personal and professional network enhances your social interaction with teachers all over the world. It enables you to share ideas, thoughts, and resources, as well as be engaged in a discussion that cultivates the mind. An example of a PLN's benefit is when you are faced with some difficulties regarding a subject area you are handling. By posting a question in the PLN, teachers in your PLN who have encountered the same problem and have found a working solution to it, can post and share responses with you.

Another example is when you want to visit a new place and would like to have some knowledge about it. You can just post your query in the PLN and expect responses from other members.

## *How do I establish and use my own TPLN?*

The next section of this eBook introduces you to different tools that you can use in building your own TPLN. Some of the social media tools identified here, such as Twitter, Facebook and blogs are explained in detail in their respective sub-eBook.

### Email

One of the foundation tools for building a TPLN is email. Most social networking sites require you to have an email account. While social media sites like Twitter and Facebook have exploded with the arrival of mobile technologies, email remains a very important tool for communication, collaboration, and information exchange.

- How to create an email

Email or electronic mail is the transmission of messages (emails or email messages) over electronic networks like the internet. To further understand an email, here is an article written by Heinz Tschabitscher posted in the website email.about.com that explains an email as it is related to post mail. Here are excerpts from the article.

The email message - Instead of using a pen to write a letter on paper, you're using your keyboard to type an email message in an email program (tap on the link to view content) on your computer.

Sending the email - When the email is finished and has been addressed to the recipient's email address, you don't put a stamp on it and post it but press the Send button in the email program. This makes the email message go on its journey.

Email transport - While postal services transport letters and parcel, email servers transmit (tap on the link to view content) email messages from sender to recipient.

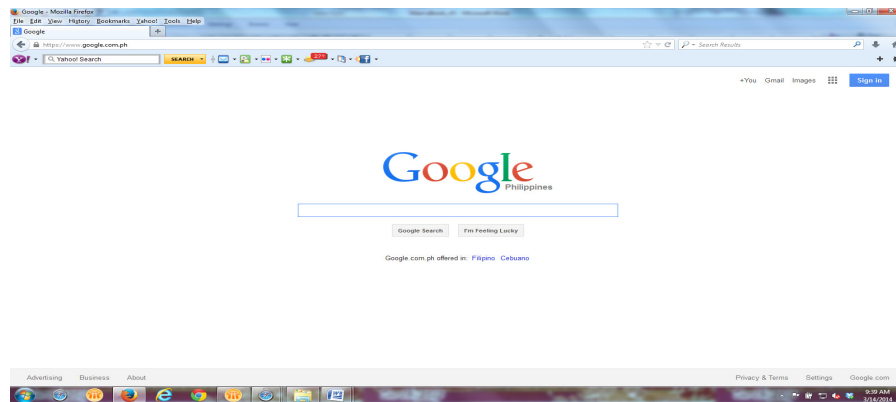
Fetching new mail - If you've got new mail in your mailbox (a folder in your email containing your emails), you go and fetch it. Similarly, your email program can check for new email messages at your mail server and download them for you to read.

Tap on the link to view the full article: [http://email.about.com/cs/beginningemail/a/email\\_basics.htm](http://email.about.com/cs/beginningemail/a/email_basics.htm)

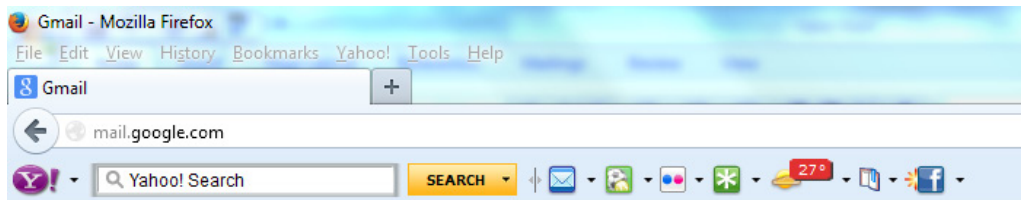
There are many email providers in the internet, and these include Google, Yahoo, Hotmail, AOL, and Microsoft. The website [wikiHow](#) gives a two-part detailed steps on how to create a Gmail account and how to use the Gmail account. An email account contains your email address where senders can send their emails to you.

At this point, you will create a Gmail account, if you still don't have one. It is suggested that you use a personal computer for doing this. Depending on the time when you will create your email account, the steps describe below may vary a little.

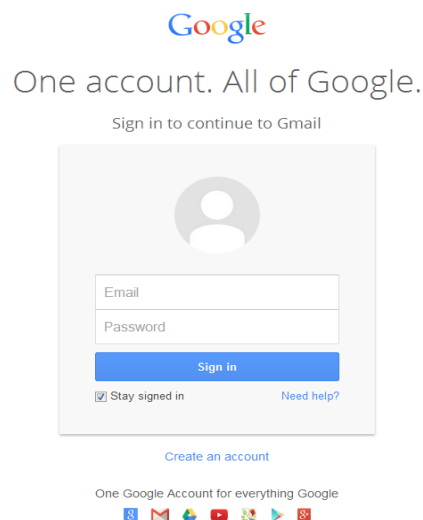
1. Open the web browser in your PC. The web browser can be any of the following: Safari, Firefox, Chrome, or Internet Explorer. In this scenario, you will use Firefox as your web browser.



2. In the address field, type <http://mail.google.com>



3. The Google accounts page will appear.



4. At the bottom of the screen, look for the word "Create an account." Click those words. This will open to a page that says "Create your Google account."

**Create your Google Account**

One account is all you need  
A single username and password gets you into everything Google.

Make Google yours  
Set up your profile and preferences just the way you like.

Take it all with you  
Switch between devices, and pick up wherever you left off.

**Name**  
First name: Seamed Last name: Innotech

**Choose your username**  
sim542014@gmail.com

**Create a password**  
\*\*\*\*\*

**Confirm your password**  
\*\*\*\*\*

**Birthday**  
January 23 1970

**Gender**  
Male

**Mobile phone**  
+63

**Your current email address**  
innotech1970@gmail.com

**Prove you're not a robot**  
☐ Skip this verification (phone verification may be required)

**Type the text:**  
155

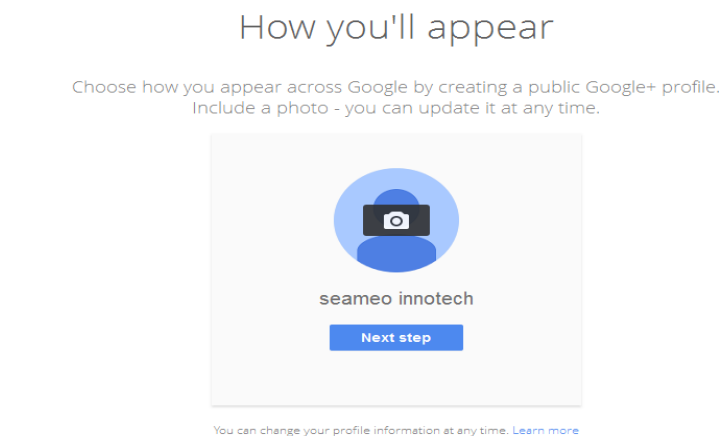
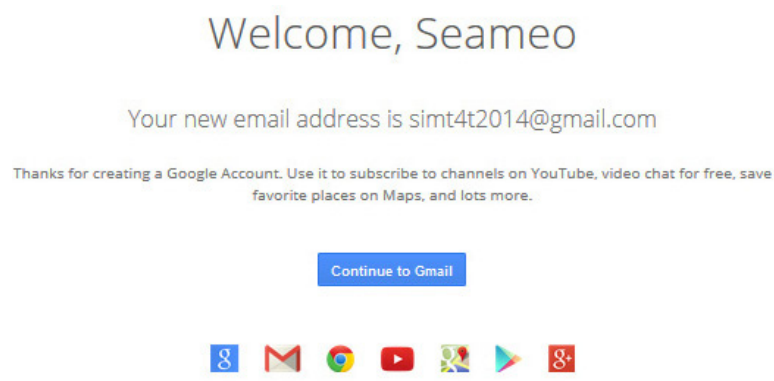
**Location**  
Philippines

☒ I agree to the Google [Terms of Service](#) and [Privacy Policy](#)

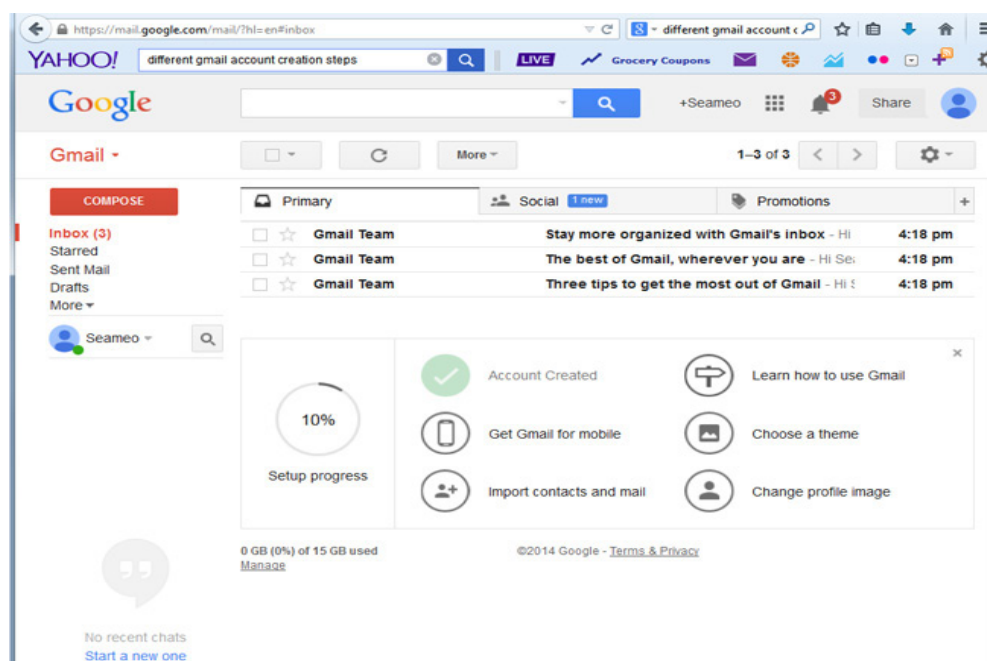
**Next step**

5. Fill in the details being asked in the form: your first name and last name, and your chosen username and password (minimum of 8 letters or numbers or a combination of both). The username is what will appear every time you open your email account. This is like your screen name. The password is what you will use to open your email account.
6. In the "Confirm your password," you just need to type again the password that you indicated. Fill in the rest of the fields in the form: your birthday, gender, and your mobile phone number. It is important to indicate your contact number in case you forget your password and you need to reset it. Google will send a message to you through your mobile number. Select the country where your phone is registered, then enter the numbers. By default, the country selected is Philippines.
7. If you have a current email, please enter it as well. If you don't have one, leave it blank. Under "Prove you're not a robot," type the numbers you will see in the picture shown. The "Location" will usually indicate by the default the country where the account is being created, then click the "I agree to the Google Terms of Service and Privacy Policy" radio button.

8. Go to the "Next step" by clicking on the button. This will bring you to a page that says "How you'll appear." You can choose to do this some other time, or follow the steps described in wikiHow. Meantime, click the button that says "Next step."



9. You will see a welcome message. Congratulations! You have created a Gmail account. Click the button "Continue to Gmail" to open your account.





## Social Networking Site (SNS)

There are many social networking sites available today. The MT4T Toolkit currently focuses on four social networking sites: Facebook, Twitter, Edmodo, and blog (LinkedIn). How to use these sites using mobile devices are contained in separate sub-eBooks. It is important that you become confident in using these four sites first, as these are the basics that a teacher needs to know and master before moving to other social networking sites.

The four social networking sites are chosen because they are the most commonly used, and they can be used by basic, intermediate, advanced, and expert users. For teachers who are fairly new in social networking, it is best to start first with these four sites. As you progress in using these four sites, your natural instinct will prompt you to be curious and seek more knowledge. This serves only as a starting point in your journey towards building your own personal learning network.

## E-discussions

An essential element of a successful TPLN is the ability to participate in electronic discussions, particularly through blogs, with other teachers and education stakeholders. A specific eBook tackles blogging in detail and contains guides and tutorials on how to participate in online discussions.

- Blogs

To stay updated in your personal and professional network, you need to always read the posts of your friends and give comments or answer posts that interests you. In giving feedback, you are helping those who are in need, and in the future, when you will be needing help or feedback from others, you will surely find it nice to receive replies to your posts, too. The sub-eBook on Blog (LinkedIn) provides more information about blogging.

## Collaboration

The key to establishing a TPLN is to promote opportunities for collaboration with other like-minded teachers.

- What is Collaboration?

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

An example of collaboration is when two or more teachers in a school join together to work on a lesson, trying it out in their classes and coming again together to discuss how else the lessons can be enhanced to attain sufficient improvement in student learning.

Here's another example: One of your friends in your TPLNs is a chemist. You invite your friend to be your guest-lecturer in your chemistry class and your friend agrees. So, you assemble your class in a room, set up the technology using video call or video conference, and your friend discusses the topic, even showing some experiments in the laboratory on how to mix chemicals. This is all possible using the technology of video call from your mobile device.

- How can I collaborate?

Collaborating is as easy as asking a friend to help you prepare lessons for your class or asking one of your friends from your TPLN who specializes in a certain field to help you prepare for a lesson so that your lessons will be more engaging. On the other hand, you can also be the one providing help to other teachers in your TPLN who needs help in areas where you have the expertise or the experience.

One example is when a friend in your TPLN asks for help in finding an animation explaining how the heart pumps blood to the body. Because you have been teaching this topic for quite some time, and have prepared a good animated presentation which your students had enjoyed learning, you can now share this presentation with your friend by just sending the file via email.

Your TPLN is a useful avenue for collaborating with other teachers or educators and as you are able to seek help as well as provide it, your network of like-minded people will continuously grow.

- Examples of collaboration

A teacher has planned a lesson about plants in the forest. She wants to show to her class the biggest flower in Southeast Asia, so she posted in her Facebook that she wants her students to see the biggest flower in Southeast Asia. One of her friends happens to be a Park Ranger in Malaysia. Her friend said they can use FaceTime to give her students 'a walk in the forest.' The day comes to discuss forest plants. The teacher connects her iPad to the projector and speaker, then calls her friend from Malaysia. Her friend accepts the call and greets her students. Using an iPhone, the Park Ranger tours the students in the forest of Mt. Kinabalu in Malaysia. While showing the plants in the forest, the Park Ranger explains about some of the plants and flowers in the area until he arrives at the place where the biggest flower in Southeast Asia is planted. The Park Ranger talks about the flower for 10 minutes and afterwards, bids goodbye to the students and the teacher.

A teacher who has a lesson on the solar system wants his students to learn about the properties of every planet in the solar system. He does not know what technology tools are available, so he posts a message in his Twitter account asking for help in teaching the solar system. One of his friends suggests he use an Augmented Reality app designed to display a three-dimensional model of the solar

system and gives information and some materials. Using his tablet, he connects to the projector and lays down on the table the augmented reality marker he downloaded from the app store, and focuses the tablet camera on the marker. The whole class is amazed to see from the projector screen the three dimensions or 3D of the solar system as if floating in space.

- What applications can be used for collaboration?

- Skype

Skype is a video conferencing service provider that offers free video calls between subscribers. In addition to standard video conferencing calls, Skype enables file transfers, texting, and video chat. The service is available for desktop computers, notebook and tablet computers and other mobile devices, including mobile phones.

You can download Skype from <http://www.skype.com/> for use on a computer and from an app store for use on a mobile device.

- Yahoo Messenger

Yahoo Messenger is an Instant Messaging or IM service provider. IM is an easy way to send and receive messages quickly from our computers or mobile phones just like text messaging. Instant messaging allows you to carry on a conversation with someone else through your personal computer or mobile devices. You type in a message, which then travels over the internet from your computer or mobile device to the other person's computer or mobile device. Within a few seconds, the message appears in an IM window on the recipient's screen. That person reads the message and types back a response. Small, separate IM windows on the screen allow you to carry on conversations with several different people at a time.

You can download Yahoo Messenger from <https://messenger.yahoo.com/> for use on a computer and from an app store for use on a mobile device.

- Google Hangouts (formerly Google Chat)

Google Hangouts is a free video chat service from Google that enables both one-on-one chats and group chats with up to ten people at a time. It is similar to Skype, FaceTime and Facebook video chat. Google Hangouts focuses more on "face-to-face" group interaction as opposed to one-on-one video chats. It can host up to 10 video chats, which means 10 friends can see each other at one time. It can be accessed also via laptop and desktop computers, as well as with Android mobile devices and iOS-powered mobile devices. In addition to video chatting, Google Hangouts users can share documents, images and YouTube videos with other users.

You can download Google Hangouts from <https://www.google.com/+learnmore/hangouts/> for use on a computer and from an app store for use on a mobile device.

- Chat

This is an online conversation in which you are immediately able to send messages back and forth to one another. Often you will hear people say, "I was chatting last night with someone from Malaysia." They were probably not talking on the telephone, which can cost a few cents every minute. They were probably talking about online chat.

Online chat doesn't cost anything extra, as long as you have an Internet connection. Chat is like talking to another person or other persons using the internet in a computer or mobile device who can be nearby or in other countries. Chatting is a good way to communicate and connect to your friends, colleagues, and families even though you are far away from them. Examples of chat are Facebook Chat, Google Hangouts, iMessage, Yahoo Messenger, Skype chat, and AIM (AOL Instant Messenger).

- FaceTime

FaceTime is a video chat application developed by Apple. FaceTime remains available only to users of Apple products. Specifically, you can use FaceTime from your iPhone, iPad, iPod Touch, or Mac computer, and you will need to be contacting someone who has the same devices. How you use FaceTime depends on which device you want to call. If you want to call someone's iPhone, you can just dial that someone's phone number. If you want to reach someone on the iPad, iPod Touch, or Mac computer, you will need to type in thaty someone's email address. The good news is when you make or receive a FaceTime call, it will ring on all Mac devices that you or your contact have. This means you are reachable wherever you are and you can reach the person you want to reach as well, provided that person is using the devices from Apple.

## Social Media

- What is social media?

Social media is a term used to describe a set of tools that promotes interaction, discussion, and collaboration to allow persons to build relationships and share information.

Social media is the future of communication; it includes numerous collections of internet-based tools and platforms that increase and enhance the sharing of information. This new form of media allows the transfer of text, photos, audio, videos, and information among internet users. Examples of Social Media are Facebook, LinkedIn, Twitter, Diigo, Edmodo, and Pinterest.

- How can I use social media?

The issue of how social media is used for personal and professional development of teachers is one that is of vital importance because it enables teachers to keep developing content, ideas, and resources. Social media is filled with passionate educators that are trying to learn and grow together in a way that benefits their community, schools, classrooms and students. Detailed explanations on how teachers can use different types of social media for teaching and learning and for their own professional development are explained in four MT4T sub-eBooks: Twitter, Facebook, Edmodo, and blogs.

Use social media to connect to friends, families, and colleagues. Create a network of colleagues with whom you can share best practices related to the use of social media and technology for teaching and learning.

## Conferences

- What is a conference?

A conference is a large gathering of individuals or members of one or several organizations for discussing matters of common interest. In this era of internet proliferation, conference can mean (1) a group of people calling each other, or a conference call; (2) a group of people talking to each other by means of video or video conferencing; and (3) a lecture or a seminar happening online where the audience participate by watching from their mobile devices, posting questions through chat, and the lecturer answers live from the website.

- How can I participate in a conference?

There are many ways you can participate in a conference. You can be invited to attend or you can attend at your own accord. More often than not, conferences are advertised. From time to time, announcements of a conference which you can attend are posted in social networking sites.

In a web conference or webinar, you can simply attend by clicking on the link of the webinar and confirm your participation. Sometimes the convener will send you email links so you can attend. Most webinars are free; however, there are some that charge a minimal fee.



- Examples of conferences

#### EDMODOCON

<http://www.edmodocon.com/>

EdmodoCon is a free annual online conference. Teachers share, inspire, and showcase ways on how they are using Edmodo and other digital tools in the classroom. Last year 12,000 educators from 50 states and 117 countries registered for the event.

You will learn more about how to access Edmodo in the sub-eBook on Edmodo.

### Educational Resources

- What are educational resources?

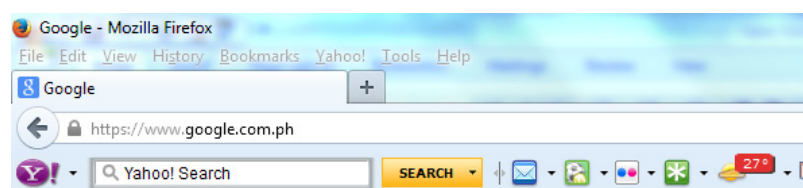
Educational resources help in your pursuit of personal and professional growth. There are several different types of educational resources. One type of educational resource is a physical place where you can learn and expand your knowledge. This may be through face-to-face educational resources, such as schools. Other educational resources are not represented by a physical location. These websites provide information or services that help you learn.

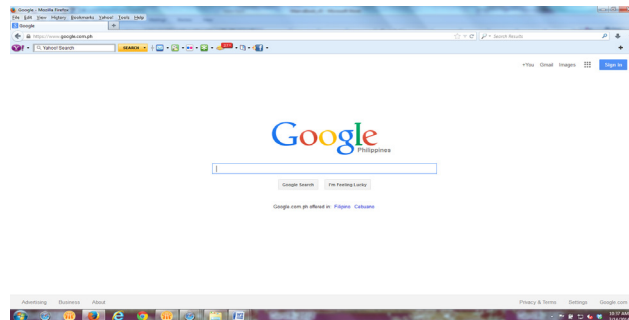
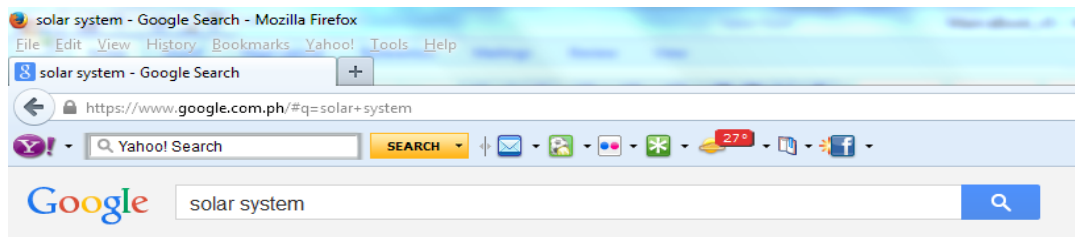
Because of the internet, you can look up other important educational information quickly by using your mobile device. You can even access free videos or written tutorials that teach you a wide variety of subjects and skills. For example, using tablets or smartphones with internet access, you can watch a video that shows you how to teach a particular topic.

- How to find educational resources

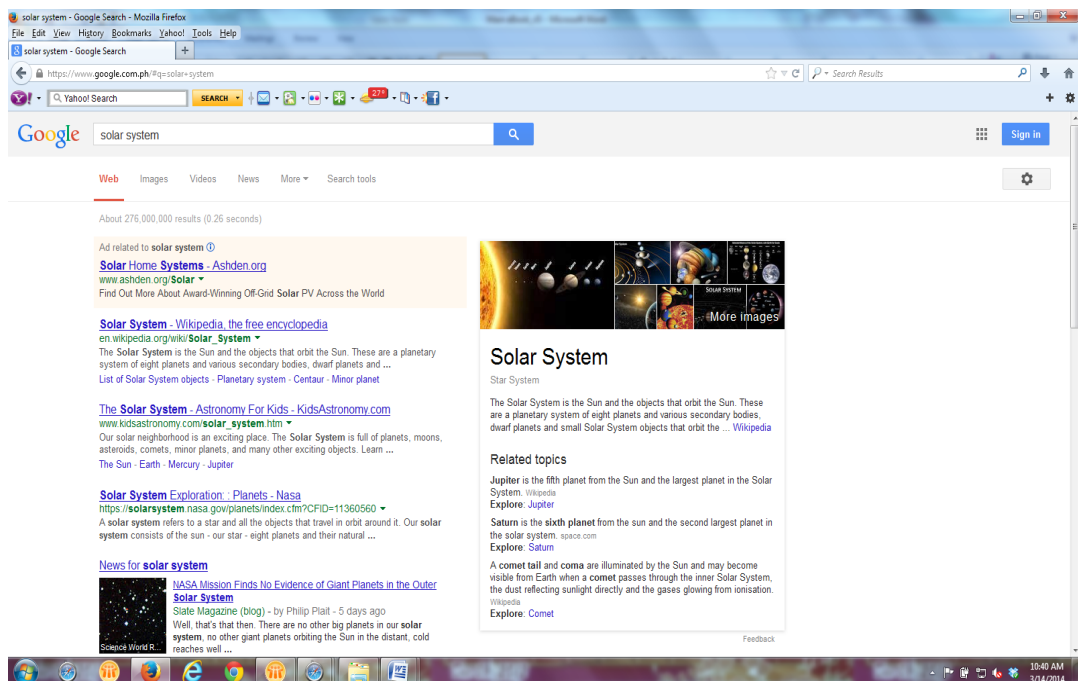
Assuming you need an educational resource regarding the solar system, follow these simple steps to search for appropriate resources:

1. Open your web browser. The more popular browsers are Safari, Firefox, Chrome, and Internet Explorer. Your mobile devices could have its own browser, particular if it runs on android system. In the address field, type [www.google.com](http://www.google.com).





2. The Google web page will appear. Type in the text field "solar system" then press "Enter."
3. Based on those key words, thousands of results will appear. The top ten results, usually, are the best results.



- Click one result that is most relevant to what you need. Below is an example. This web link says, "News for solar system." This means that by clicking on this link, you will be pointed to a website with news related to the solar system, or mentions the words "solar system."

### News for solar system

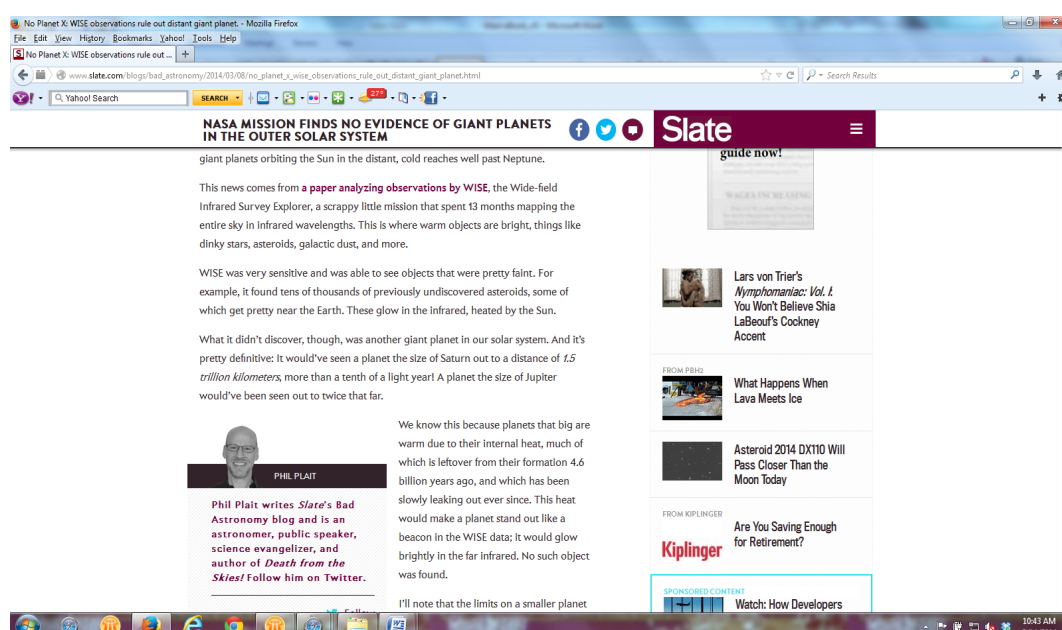


### NASA Mission Finds No Evidence of Giant Planets in the Outer Solar System

Slate Magazine (blog) - by Philip Plait - 5 days ago

Well, that's that then. There are no other big planets in our solar system, no other giant planets orbiting the Sun in the distant, cold reaches well ...

- Once you clicked on the title, the website containing the news will appear.

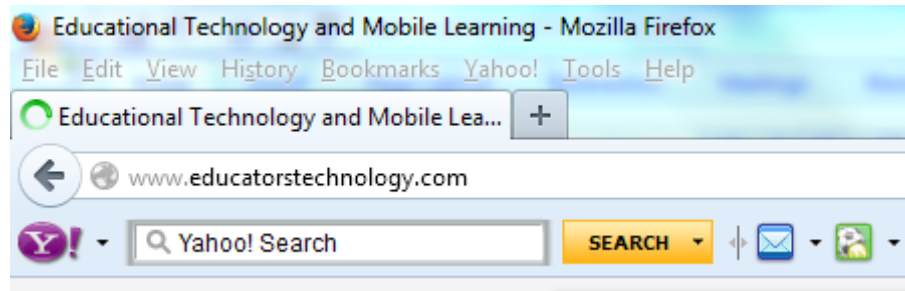


Once the website appears you can find a lot of useful information. If it did not provide you with the right resources you need, go back to the results page in Google, and try to click the other results until you find the information that best suits your needs.

- Examples of educational resources

Below is an example of a website which caters to educational resources, and the following steps describes how to access the website.

1. Open the web browser in your device, and similar to the process of opening the Google website, type in the address box [www.educatorstechnology.com](http://www.educatorstechnology.com), which is a website containing educational resources on mobile technologies.



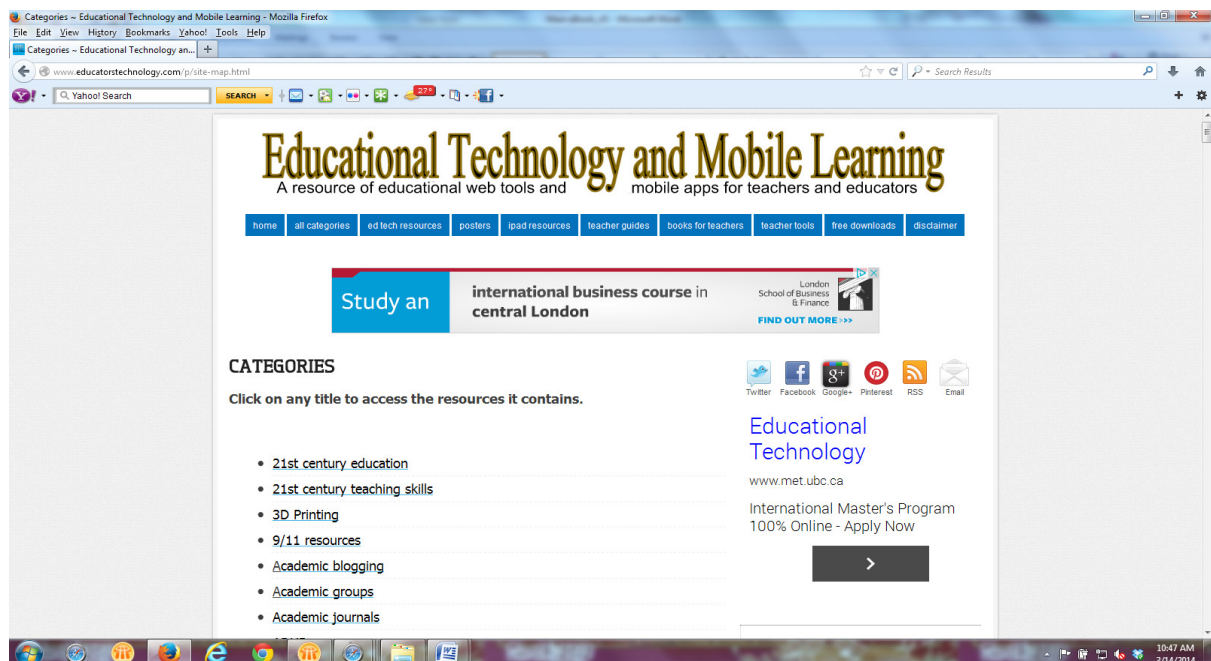
2. The main page of the website will appear.



- From the menu listed in blue boxes, click the "ALL CATEGORIES" button. This will open to a page that lists down the main categories that you can find within the website.



- From among the list of categories, choose "21<sup>st</sup> century education" by clicking on the link. A list of resources based on that category will appear. You can choose to read all of these one-by-one, or choose only those that are relevant to what you need.





The next section of the main eBook will cover topics on promoting a teacher's roadmap for digital citizenship and netiquette for teachers when using your TPLN.

## **Teacher's Roadmap for Digital Citizenship**

- What is digital citizenship?

"Digital citizenship can be defined as the norms of appropriate, responsible behavior with regard to technology use. In qualifying as a digital citizen, a person generally must have extensive skills, knowledge, and access of using the Internet through computers, mobile phones, (tap on the highlighted words) and web-ready devices to interact with private and public organizations. People characterizing themselves as digital citizens often use IT extensively, creating blogs, using social networks, (tap on the highlighted words) and participating in web journalism sites. Just like literacy and numeracy initiatives which provide people with the skills to participate in the work force, digital literacy is an essential skill to be confident, stay connected, and actively involved in the digital world, an essential skill in this 21<sup>st</sup> century."

- Do I need digital citizenship?

As a teacher, you are responsible for educating and learning alongside your students. You cannot teach appropriate digital citizenship if you cannot model it.

Think of it this way: you are a citizen of your own country, and as a citizen, you have to observe rules and guidelines in your country. It is expected that every citizen must obey the law of the land. As a digital citizen, you also need to obey rules and guidelines and there are laws that need to be followed as well, like copyright and privacy laws. As a digital citizen, you must also abide by these laws.

There is an article in the internet that describes why we need Digital Citizenship. The article can be accessed here:

<http://allthingsd.com/20120319/why-digital-citizenship-must-be-taught-in-schools/>

The article describes why digital citizenship must be taught in schools. According to the article, there should be standardized educational solutions and training programs that teach high-tech safety rules and responsible online usage. Furthermore, it states that it's vital to equip students, teachers, and parents to meet the challenges of the modern world by adhering to netiquette and becoming a responsible digital citizen.

- What are the elements of digital citizenship?

- digital access
- digital commerce
- digital communication
- digital literacy
- digital etiquette
- digital law
- digital rights and responsibilities
- digital health and wellness
- digital security

Source: [http://digitalcitizenship.net/Nine\\_Elements.html](http://digitalcitizenship.net/Nine_Elements.html)

- How can digital citizenship benefit me?

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

As teachers we give children their daily reminders: Be careful, don't cross the street without an adult and don't talk to strangers. When we look at young people today, do we feel as though they are getting the right reminders about online safety and responsible online behavior? Are these imparted daily by adults that students trust? When schools and teachers take the time to share good digital citizenship practice, it is of benefit to the students and the whole digital community as well.

A person only needs to read the headlines to know that there is a pressing need to emphasize both safe and responsible use of the internet. With the fast pace of change in technology, there is no doubt that ongoing discussions of what is right, what is true, and what it means to be a good 'digital citizen' can benefit us all by being protected online.

We have heard and read news about government leaders and prominent personalities whose lives and careers were destroyed because of their posts and comments years ago which haunted them and caused their downfall. We are not different from them; they are also people who use the internet. The only difference is we should practice good digital citizenship by adhering to netiquette.

## Netiquette

- What is netiquette?

Netiquette is the social code of the internet made up of a composite of the words "network" and "etiquette." The internet is a network and etiquette is a social code. A network is a collection of computers that can communicate digitally. Networks are computers that can share signals. Etiquette is a social code of behavior according to contemporary and conventional standards. Therefore, netiquette is the social code of the internet because the internet is a network and etiquette is a social code.

Proper netiquette in internet communication is as important as etiquette in the real world. In reality, a person can communicate with another in so many different ways that some commonly understood words may have little meaning. On the internet, words often are the sole determinant of the meaning of a message. Therefore, observing proper netiquette is important in digital communication because it is different from real conversations.

- How to apply netiquette

An article written by Mark C. Frank and posted in the website [edtech2.boisestate.edu](http://edtech2.boisestate.edu), mentioned that "Netiquette rules in electronic communications." Here are some of the excerpts from the article.

### Spelling and Grammar

Always use good grammar and correct spelling. Poor grammar and misspelled words are unprofessional and reflect poorly on you and your message. A suggestion is to type your message or information into MS Word, apply the spell and grammar checker, make changes, then copy and paste the text to your communication source. Take the time to ensure your audience does not have to read a poorly written message with typos.

When communicating in the business world, avoid using "me" or "I" with your message. Business messages should be about the reader and not the writer. Talk about the other person and use the word "you" and "your" in your message. 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 like in online classrooms and Web sites; however, business writing requires the "you" attitude at all times while sending emails, 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 emails and Web sites to read, and if you write senseless words leading to a long email or electronic message, people might click out early and move on to their next reading.

## Proofread

Always proofread your message! You do not have the opportunity to use body language while communicating over the Internet, and people may miss-interpret 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! A good suggestion is to read aloud your message to ensure it is a polite and courteous communication for your audience.

## Use Good Tone

Good tone is critical with electronic writing. The wrong words can leave a bad impression and upset the reader--especially with emails and in online classrooms. 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 body language or hear the tone of your voice. Always check your writing to ensure it is polite and neutral regarding requests and conveying information. An email with good tone can accomplish much more than one that is overbearing and with the "me" attitude. Remember, the "you" attitude is a good way to convey your messages with good tone.

## Double Check Email Address

With email programs, it is easy to send a message to the wrong email address. This happened to a colleague recently, and he lost a lucrative account with my company over the incident. He did not like something I did, and lashed out at me to another colleague (with intentions of doing so behind my back) via email. The message inadvertently ended up in my email box and revealed his true attitude towards my company and me. Consequently, I am no longer his customer. Before clicking the send button, always check the email address of the recipient.

## 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 size is large, be sure to convert the file to a PDF format prior to attaching the file. Always convert long documents, large graphics, and pictures to PDF format to ensure the file size is reasonable and downloads quickly--especially for those who do not have fast connection speeds. If you do not want to convert pictures to PDF, optimize them using Photoshop or another image program.

## Internet Messages are Permanent

The above story about a colleague leads to another point about the Internet. Be careful with what you write! Sometimes it is best to keep thoughts to yourself because the Internet is a permanent record of what you send. You cannot retract or delete messages or posts (in most cases), so if you do not want your message read by the wrong people, you probably should communicate your message using another media and avoid sending it electronically.

## Be Respectful

Respond to other people's messages promptly, and if they ask for a return acknowledgement or receipt of an email, give it to them! Be polite, friendly, and professional at all times. Many of these rules imply respect for the reader; the Internet is a permanent message and reflects on you as a person. Use these rules to your advantage by thinking about your message and who reads it. The Internet can be a great tool for building a good reputation and respect from your peers.

## Be Professional at All Times

Avoid getting into arguments in chat rooms, online classrooms, or with emails. 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, people often use the power of electronic writing to vent or lash out at each other. 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!

You may tap on the link to view the full article written by Mark C. Frank <http://edtech2.boisestate.edu/frankm/573/netiquette.html>

- Examples of netiquette

"Netiquette is a term referring to good behavior while connected to the Internet. Netiquette is mainly referring to behavior while using Internet facilities such as individual Web sites, emails, newsgroups, message boards, chat rooms or Web communities. Some examples of netiquette are listed below:

- Do not use someone else's name and pretend to be that person.
- 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 racial 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.

Source: <http://www.internet-guide.co.uk/netiquette-guide.html>

- Some consequences of not adhering to netiquette

Using netiquette will lessen the chance of misunderstandings or arguments with a fellow member of your personal and professional learning network. Not using netiquette could potentially have lasting consequences. Some consequences of not using netiquette include creating unnecessary embarrassment, undermining teamwork, and breeding "toxic worry" by spreading miscommunication. Many of these consequences could be easily corrected by maintaining a balance between email and face-to-face communication. Improper netiquette could encourage other members to confer with one another and either alienate the offensive person or ask them to prove their claim, which could lead to an embarrassing situation. Conflict with other people is one of the consequences of not using netiquette. Never assert that email messages are safe and secure; e-mail messages are stored on back-up tapes for years. If netiquette is not practiced, embarrassing moments may happen that could have been easily prevented. With online communication, it is important to remember: nobody is immune to miscommunication. Good netiquette techniques can minimize hurt feelings, relationships, and embarrassing moments.



## **The Six Sub-eBooks**

Now that you are familiar with some key concepts and tools in establishing your TPLN, you are now ready to explore more in-depth the possibilities offered by mobile devices and different social media in the series of six sub-eBooks which currently comprise the MT4T Toolkit. The contents of the six sub-eBooks are summarized below:

### ***Sub-eBook 1: Uses and Functionalities of Mobile Devices***

This sub-eBook explains the available applications in popular mobile devices and their various applications in teaching, promoting higher order thinking skills and even personal and professional growth for teachers.

#### **Basic Users**

- What are mobile devices?
- What are mobile applications?
- What are the most common mobile operating systems?
- What is an Android mobile operating system?
  - Home Scree
- What is an iOS mobile operating system?
- What is a Windows operating system?
- How to create a Google Play account
- How to create an Apple ID
- How to create an account in Windows Phone Store
- What are the basic standard apps in an Android operating system?
  - Calculator
  - Camera
  - Contacts
  - Email
  - Gallery
  - Hangouts
  - Internet
  - Messaging
  - Play Store
  - Settings
  - SPlanner (Calendar)
  - Video Player
- What are the basic standard apps in an iOS operating system?
  - App Store
  - Calendar
  - Camera

- Contacts
- FaceTime
- iTunes Store
- Mail
- Messages
- Photos
- Newsstand
- Safari (Internet)
- Settings
- What are the basic standard apps in a Windows Phone operating system?
  - Calculator
  - Calendar
  - Camera
  - Internet
  - Kid's Corner
  - Mail
  - Messaging
  - People (Contacts)
  - Phone
  - Settings
- How to connect to a wireless network
  - 3G
  - Bluetooth
  - Wi-Fi
- Mobile device security
- Enhancing the battery life of your mobile device
- Mobile device SD card

#### Intermediate Users

- What are the applications in an Android operating system?
  - Books & References
  - Business
  - Comics
  - Communication
  - Education
  - Entertainment
  - Finance
  - Games
  - Health & Fitness

- Libraries & Demo
- Lifestyle
- Live Wallpaper
- Media & Video
- Medical
- Music & Audio
- News & Magazines
- Personalization
- Photography
- Productivity
- Shopping
- Social Networking
- Sports
- Tools
- Transportation
- Travel & Locals
- Weather
- Widgets
- What are the applications in an iOS operating system?
  - Books
  - Business
  - Education
  - Entertainment
  - Finance
  - Games
  - Healthcare & Fitness
  - Lifestyle
  - Medical
  - Music
  - Navigation
  - News
  - Photography
  - Productivity
  - Reference
  - Social Networking
  - Sports
  - Travel
  - Utilities
  - Weather

- What are the applications in a Windows mobile operating system?
  - Books & Reference
  - Business
  - Children & Family
  - Education
  - Entertainment
  - Games
  - Health & Fitness
  - Lifestyle
  - Music & Video
  - News & Weather
  - Personal Finance
  - Photos
  - Social
  - Sport
  - Tools & Productivity
  - Travel & Navigation
- What are some suggested useful apps in an Android operating system?
  - Maps
  - Polaris Office
  - Voice Search
- What are some suggested useful apps in an iOS operating system?
  - iBooks
  - Podcast
  - iTunes University
- What are some suggested useful apps in a Windows operating system?
  - Office 365
  - Bing Search
  - Bing Translator
- What are some suggested useful communication apps in the three operating systems?
  - Skype
  - WhatsApp
- What are some mobile device peripherals?

### Advanced Users

- What is a "Cloud" based storage?
- What are the etiquettes in using your mobile device?
- How can I use Android applications for my Personal and Professional Growth?
- How can I use iOS applications for my Personal and Professional Growth?
- How can I use Windows applications for my Personal and Professional Growth?

### Expert Users

- Suggested applications in creating your own eBooks
- What are some of the Android applications that promote Higher Order Thinking Skills (HOTS)?
- What are some of the iOS applications that promote Higher Order Thinking Skills (HOTS)?
- What are some of the Windows applications that promote Higher Order Thinking Skills (HOTS)?
- What are some examples of using mobile devices for teaching and learning?
- Practical uses of mobile devices in the classroom

## ***Sub-eBook 2: Facebook for Teachers***

This sub-eBook features Facebook, a popular free social networking website that allows registered users to create profiles, upload photos and videos, send messages and keep in touch with friends and colleagues.

### Basic Users

- What is Facebook?
- How to set up a Facebook Account
- How to install Facebook in Android
- How to install Facebook in iOS
- How to install Facebook in Windows
- How to compose a post
- How to add friends
- How to send a message
- How to reply
- How to share a photo
- How to like a photo
- How to tag a photo
- What are other Facebook terms you should know?

### Intermediate Users

- How to create a group
- How to send a group message
- How to upload files in a Facebook group
- How to use Facebook notes
- How to use Facebook pokes
- How to use Facebook events
- How to block/unblock users
- What are the implications for privacy of information when using Facebook?
- How to deactivate your Facebook account

### Advanced Users

- How to use the app center
- What are some "Facebook" applications for learning?
- How to search for educational applications in Facebook
- How to share multimedia content
- How to use Facebook to send reminders, announcements, upcoming due dates, or other classroom news
- What is the etiquette in using Facebook?

### Expert Users

- What are some examples of using Facebook for teaching and learning?
- Examples of using Facebook notes by teachers and students
- More tips on using Facebook in the classroom
- How to promote Higher Order Thinking Skills (HOTS) and values in Facebook
- Links to video tutorials and other approaches to using Facebook for personal and professional growth

### ***Sub-eBook 3: Edmodo***

This sub-eBook focuses on Edmodo, a web-based learning and social media platform designed for teachers that provides a safe and easy way for your class to connect and collaborate, share content, and access homework, grades and school notices.

#### **Basic Users**

- What is Edmodo?
- How to sign up as a teacher
- How to create a group
- How to sign up your students
- How to sign up parents
- How to install Edmodo in an Android mobile device
- How to install Edmodo in an iOS mobile device
- Accessing Edmodo in a Windows mobile device
- How to compose a post
- How to compose a post in "Alert" to parents
- How to reply to a post
- What are some Edmodo terms you should know?
- What are the implications for privacy of information when using Edmodo?
- How to edit Edmodo privacy settings
- What is the etiquette in using Edmodo?

#### **Intermediate Users**

- How to add a Co-Teacher to a Group
- How to archive or delete a group
- How to add links to resources in the Edmodo library
- How to upload files in the Edmodo library
- How to use "Cloud" storage to add files in your Edmodo library
- How to use the camera of a mobile device to upload pictures in your Edmodo library
- How to attach files in "Note"
- How to attach links in "Note"
- How to attach items from the Edmodo library to "Note"
- How to attach a picture in "Note" using the built-in camera of a mobile device
- How to send an "Alert" using your mobile device



### Advanced Users

- How to create an event or task in Edmodo planner
- How to create assignments
- How to grade an assignment
- How to create a quiz
- How to access the gradebook
- How to award badges
- How to use "Polls"
- What are the applications available in Edmodo?
- How to access the app store
- What are some of the educational apps in Edmodo?
- How to manage apps
- How to view apps categories in "Manage My Apps" windows
- How to use the app launcher
- How to use "Discover" to search for content in Edmodo

### Expert Users

- Suggestions on how to use Edmodo for teaching and learning
- Examples of using Edmodo in a Class
- How to promote HOTS and values in Edmodo
- How you can use Edmodo for personal and professional growth

## ***Sub-eBook 4: Twitter for Teachers***

This sub-eBook highlights the functions of Twitter. Twitter is an online social networking and microblogging service that enables its users to send and read text-based messages of up to 140 characters, known as 'tweets.'

### Basic Users

- What is Twitter?
- How to set up a Twitter account
- How to install Twitter in a Windows device
- How to install Twitter in an Android device
- How to install Twitter in an iOS device
- How to upload a profile photo
- How to compose a tweet
- How to follow family, friends, and colleagues
- How to use basic Twitter commands

### Intermediate Users

- What is a Twitter #hashtag?
- How to create Twitter #hashtag
- What is Trending on Twitter?
- How to send a direct message to others
- How to retweet
- What other Twitter terms you should know
- What are the implications for privacy of information when using Twitter?

### Advanced Users

- How to share images on Twitter
- How to share a video on Twitter
- How to share music on Twitter
- What are some tips on effectively using Twitter as a personal and professional tool?
- What is the etiquette in using Twitter?

### Expert Users

- How to use Twitter for research projects
- How to use Twitter for teaching and learning
- Other links to teachers using Twitter
- How to promote Higher Order Thinking Skills (HOTS) and values in Twitter

## ***Sub-eBook 5: Teachers' Use of Blogs (LinkedIn)***

This sub-eBook presents how you can use blog discussion forums to share ideas, seek information and search for opportunities to collaborate with other teachers. The sub-eBook centers on LinkedIn, a social networking service for professionals, as a platform for blogs. While it mainly helps you in creating connections, LinkedIn is also used to share work-related content with your colleagues, and other professionals.

Please note that unlike the other sub-eBooks in this Teachers' Resource Kit, LinkedIn has only two levels of proficiency: Basic and Advanced Users.

### Basic Users

- What is a Blog?
- Why should you Blog?
- What are the benefits of Blogging in education?
- LinkedIn as a Blog in education

- How to set up a LinkedIn account
- How to set up default language
- How to install LinkedIn in an Android mobile device
- How to install LinkedIn in an iOS mobile device
- How to install LinkedIn in Windows mobile device
- What are some LinkedIn terms you should know
- How to make LinkedIn connections
- How to view your network connections
- How to search LinkedIn users
- How to compose a post (Share an Update)
- How to send a message
- How to view a message
- How to reply to a message
- How to attach files to a message
- How to attach a website link into a message
- How to view notifications
- How to join a group
- How to participate in a discussion or blog
- Asking and answering questions in LinkedIn
- How to check who viewed your profile
- What are the implications for privacy of information when using LinkedIn?

#### Advanced Users

- What is the etiquette in using LinkedIn?
- How to deactivate or close a LinkedIn Account
- What are some examples of using LinkedIn for education?
- LinkedIn groups that promote Higher Order Thinking Skills (HOTS) and values in LinkedIn
- Links to approaches on how you can use LinkedIn for personal and professional growth

## ***Sub-eBook 6: Annotated Resources for Teachers***

This sub-eBook contains annotated list of selected digital resources and tools including web links that you can use for 21<sup>st</sup> Century teaching and learning, particularly in promoting higher order thinking skills.

- Introduction

### 21st Century Teaching Resources

- 21st Century Teaching Skills
- Bloom's Taxonomy
- Critical Thinking
- Classroom Management
- Digital Citizenship
- Flipped Classroom
- Teacher's Guide
- Gaming in Education
- Infographics
- Professional Development
- Web Evaluation
- Instructional Design Resources
  - Art Teaching Resources
  - Biology
  - Documentary Websites
  - Grammar Learning Websites
  - History Teaching Resources
  - Language Arts Resources
  - Literature Resources
  - Math Resources
  - Science Resources
  - Vocabulary Sites
- Resources for Personal and Professional Development
  - Anti-Bullying Resources
  - Book Reviews
  - Copyright Resources
  - Educational Posters
  - Educational Presentations
  - Educational Quotes
  - Educational Technology Blogs
  - Educational Search Engines
  - NASA (Astronomy) Resources

- Research Studies for Teachers
- TED Resources
- Video Resources
- Teacher Websites

## 21st Century Tools for Teachers

- Audio Tools
- Bookmarking Tools
- Brainstorming Tools
- Collaborative Tools
- Collaborative Whiteboards
- Creativity Tools
- Digital Scrapbook Tools
- Digital Storytelling Tools
- Drawing Tools
- Educational Apps
  - Creativity Apps
  - Dictionary Apps
  - Presentation Apps
  - Printing Apps
  - Science Apps
  - Storytelling Apps
  - Audio Apps
  - Creativity Apps
  - Diagram Apps
  - Digital Storytelling Apps
  - Drawing Apps
  - File Sharing Apps
  - Gaming Apps
  - Grading Apps
  - Grammar Apps
  - Learning Apps
  - Math Apps
  - Mindmapping Apps
  - Presentation Apps
  - Professional Development Apps
  - Special Education Apps
  - Speech to Text Apps
  - Writing Apps

- Educational Social Networking
  - Blogging in Education
  - Evernote for Teachers
  - Google Plus
  - Podcasting
  - Personal Learning Networks
  - Pinterest
  - Social Studies Resources
  - Skype in Education
  - Wikis in Education
  - YouTube Channel for Teachers

#### Higher Order Thinking Skills (HOTS)

- What are some of the Android applications that promote Higher Order Thinking Skills (HOTS)?
- What are some of the iOS applications that promote Higher Order Thinking Skills (HOTS)?
- What are some of the Windows applications that promote Higher Order Thinking Skills (HOTS)?
- How to promote Higher Order Thinking Skills (HOTS) and values in Facebook
- How to promote Higher Order Thinking Skills (HOTS) and values in Twitter
- LinkedIn groups that promote Higher Order Thinking Skills (HOTS) and values in LinkedIn

## **Conclusion**

The main eBook is like the main doorway through which you can view all the sub-eBooks. From this main eBook, you can see the covers of the six sub-eBooks. Each sub-eBook is provided with a brief description of what it contains. You can open any of the sub-eBooks that interests you to see the full content. You can also close any of the sub-eBook you have opened and you will be redirected again to the main eBook. From the main eBook, you can open again another sub-eBook that interests you.

Try to read all the sub-eBooks; follow the step-by-step directions provided until you have developed adeptness in using the social networking sites; and eventually, become tech-savvy. Broaden your personal and professional learning networks as you connect, collaborate and share with other education professionals around the world. Enjoy using the tools and social networks for improving yourself, your career, and that of your learners.

## References:

This post in the website Educational Technology and Mobile Learning shows a simple and comprehensive guide on the use of Personal Learning Networks in Education.

<http://www.educatorstechnology.com/2012/06/simple-comprehensive-guide-on-use-of.html>

This post in the website Careerealism shows how technology helps in building personal learning network.

<http://www.careerealism.com/how-social-media-build-personal-learning-network/>

This online article found in the Digital Citizenship website describes nine elements of digital citizenship.

[http://digitalcitizenship.net/Nine\\_Elements.html](http://digitalcitizenship.net/Nine_Elements.html)

This post in the Internet guide website provides a guide to netiquette.

<http://www.internet-guide.co.uk/netiquette-guide.html>



## Glossary of Terms

A glossary of terms is also provided in this main eBook to familiarize teachers with the common terms and their meaning as used in the MT4T.

- Android – a mobile phone or tablet operating system developed by Google which is available for free
- Blog – also referred to as online personal journal or diary
- Collaboration – two or more persons working together on an idea or a project
- Conference – a meeting of two or more persons to discuss a topic using the internet
- Digital Citizenship – refers to the safe, responsible, critical, and pro-active use of technology
- eBook – this the same as a printed book but published in an electronic format, where-in video, sounds, animations, and pictures are included. An eReader application is needed to read eBooks.
- Edmodo – a website dedicated for teachers, students, and parents that facilitate teaching and learning
- Educational resources – repository of teaching and learning materials
- Email – just like a traditional post mail but better, because it is delivered fast and may include audio, video, documents, and other materials. An access to the internet is needed to send and receive an email.
- eReader – an electronic software or program used to read eBooks; an eBook cannot be read without an eReader.
- Facebook – a popular free social networking website that allows registered users to create profiles, upload photos and videos, send messages, and keep in touch with friends, family and colleagues
- Forum – similar to a message board where people can reply to a post or create a post of their own
- HOTS – short term for higher order thinking skills that refer to thinking at higher levels than just restating the facts. HOTS require that doing something with the facts—understanding, making connections, categorizing, manipulating, putting together in new or novel ways, and applying facts in seeking new solutions to problems
- Internet – a massive public spider web of computer connections that allows sharing of information to everybody connected to the network
- iOS – a mobile operating system developed and distributed by Apple Inc.
- Main eBook – the eBook for teacher's personal and professional network; all the other eBooks or sub-eBooks are connected and linked to it

- Mobile applications – commonly known as “apps” or “mobile apps;” refer to computer programs designed to run on smartphones, tablets, and other mobile devices
- Mobile device – a handheld tablet or device that is made for portability and is both compact and lightweight. New data storage, processing and display technologies have allowed these small devices to do nearly anything that had previously been traditionally done with larger personal computers
- Mobile features – a set of capabilities, services, and functions in a mobile phone or other devices
- Mobile platform – also known as “mobile operating system,” refers to a set of computer programs designed to run in a handheld device
- Mobile technology – the technology used to communicate with mobile phones or mobile devices
- Netiquette – the correct and acceptable way of communicating on the internet
- Podcast – refer to digital media files like audio and video, but are produced in a series
- PLN – short term for ‘Personal learning network,’ which refers to an informal learning network that consists of people who are connected to a common interest
- SMS – short term for ‘Short Messaging Service,’ which is a system that enables mobile phones to send and receive short text-based messages
- Social media – a term used to describe a set of tools that promotes interaction, discussion, and collaboration allowing persons to build relationships and share information, e.g., Facebook, LinkedIn, Twitter, and many more
- Social networking sites – websites that people use to socialize online; send messages to one another; share interests and information; meet people; and post information, photos and videos about themselves for others to look at
- Streaming media - multimedia that is constantly received by and presented to users while being delivered by a provider. Its verb form, “to stream,” refers to the process of delivering media
- Sub-eBooks – refers to eBooks connected to or linked to the MT4T main eBook
- Twitter – an online social networking service that enables its users to send and read text-based messages of up to 140 characters, known as “tweets.” A tweet does not need a telephone number to send out, unlike a text message or SMS, but connection to the internet is required
- Web cast – a media presentation distributed over the internet using streaming media technology to distribute a single content source to many simultaneous listeners/viewers. A webcast may either be distributed live or on demand. Essentially, webcasting is “broadcasting” over the internet.

- MT4T Web Portal – the website that initially serves as an information hub for the MT4T project and will gradually evolve into an online repository of eBooks and updates regarding the project.
- Windows 8 Phone – the 3<sup>rd</sup> generation of Windows Phone mobile operating system developed by Microsoft.

