

Empowerment Technologies

12

QUARTER 1

MODULE

2

Information and Communications Technology (Part 2)



Empowerment Technologies – Grade 12
Quarter 1 – Module 2: Information and Communications Technology (Part 2)
First Edition, 2020

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MODULE

2

**Information and Communications
Technology (Part 2)**

Introductory Message

For the Facilitator:

Welcome to the Empowerment Technologies Self-Learning Module on Information and Communications Technology (Part 2)!

This Self-Learning Module was collaboratively designed, developed and reviewed by educators from the Schools Division Office of Pasig City headed by its Officer-in-Charge Schools Division Superintendent, Ma. Evalou Concepcion A. Agustin, in partnership with the City Government of Pasig through its mayor, Honorable Victor Ma. Regis N. Sotto. The writers utilized the standards set by the K to 12 Curriculum using the Most Essential Learning Competencies (MELC) in developing this instructional resource.

This learning material hopes to engage the learners in guided and independent learning activities at their own pace and time. Further, this also aims to help learners acquire the needed 21st century skills especially the 5 Cs, namely: Communication, Collaboration, Creativity, Critical Thinking, and Character while taking into consideration their needs and circumstances.

In addition to the material in the main text, you will also see this box in the body of the module:



Notes to the Teacher

This contains helpful tips or strategies that will help you in guiding the learners.

As a facilitator you are expected to orient the learners on how to use this module. You also need to keep track of the learners' progress while allowing them to manage their own learning. Moreover, you are expected to encourage and assist the learners as they do the tasks included in the module.

For the Learner:

Welcome to the Empowerment Technologies Self-Learning Module on Information and Communications Technology (Part 2)!

This module was designed to provide you with fun and meaningful opportunities for guided and independent learning at your own pace and time. You will be enabled to process the contents of the learning material while being an active learner.

This module has the following parts and corresponding icons:



Expectations - This points to the set of knowledge and skills that you will learn after completing the module.



Pretest - This measures your prior knowledge about the lesson at hand.



Recap - This part of the module provides a review of concepts and skills that you already know about a previous lesson.



Lesson - This section discusses the topic in the module.



Activities - This is a set of activities that you need to perform.



Wrap-Up - This section summarizes the concepts and application of the lesson.



Valuing - This part integrates a desirable moral value in the lesson.



Posttest - This measures how much you have learned from the entire module.



EXPECTATIONS

At the end of the learning period, the students shall have:

- improved their understanding of ICT regarding its current state;
- constructed a comprehensive description (both similarities and differences) of their chosen topic from the lesson through Venn diagram; and
- justified what they realized/valued regarding the current state and improvements in ICT.



PRETEST

Directions: Encircle the letter that corresponds to the correct answer.

1. Innovation is a common thing in the ICT industry. The _____ media is a non-profit service designed to help the people who have visual and reading impairments.

- | | |
|---------------|-------------|
| A. Assistive | C. Blogging |
| B. Folksonomy | D. Social |

2. Developed by Google, Android is an open source operating system that is being used by several mobile phone companies. Which device uses **iOs**?

- | | |
|-----------------------|------------------|
| A. Nokia devices | C. smart TVs |
| B. Blackberry devices | D. Apple devices |

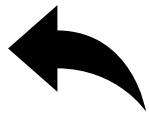
3. Social Media is a website, application, or online channel that enables web users to create, co-create, discuss, modify, and exchange user-generated content. Which one of the options is NOT an example of social media?

- | | |
|--------------------|--------------------------|
| A. Social Networks | C. Both A and B |
| B. Media Sharing | D. None among the option |

4. Currently, this is the fastest mobile network.

- | | |
|-------|-------|
| A. 2G | C. 4G |
| B. 3G | D. 5G |

5. TikTok is a social media application that can be classified as:
- A. Bookmarking site
 - B. Media sharing
 - C. Microblogging
 - D. Blogs and forums



RECAP

Directions: Fill-in the chart with important details from the past lesson.

Web 1.0	Web 2.0	Web 3.0
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____



LESSON

Aside from Ash's Pokémon creatures, the world of ICT keeps on growing and evolving, thus the industry keeps on producing innovations that caters the needs of the digital natives and digital immigrants. When we say "trends", we are not only talking about the fashion styles and clothes; but also, we follow trends in ICT. These are the 4 trends in ICT:

1. **Social Media** – These are the websites, application, or online channel that allows the netizens (Internet citizen/web users) to create, co-create, discuss, modify, and exchange user-generated content such as images, documents, et cetera with the other netizens. People usually misuses the term "social media" by referring it to a specific application or website, however, this is an umbrella term. It means that social media has six (6) types:

1.1. **Social Networks** – This type enables the user to connect with the other user that has same interest, background,



Image credit: facebook.com

and/or information. It has rich user experience as the user can personalized their profile accounts, connect with the other users regardless the distance, and react and leave comments on other user's posts (Ex.: Facebook and Google +).

1.2. **Bookmarking Site** – This site allows the user to store and manage links to various websites and resources. Most of these sites allow you to create a tag that allows you and others to easily search or share them (Ex.: StumbleUpon and Pinterest).



Image credit: play.google.com

1.3. **Social Media News** – Simply known as social news. It is far different from the traditional news platform. This site promotes sharing between the news provider and the user, becomes a central hub for new stories from various other third-party sources to deliver instant news, and users can interact with the news stories by voting, liking, commenting, sharing, et cetera (Ex.: Reddit and Digg).



Image credit: entrepreneur.com

1.4. **Media Sharing** – Do you like to share your selfies, or to show your self-made film? Media sharing applications enable user to upload and share media content like image, video, and music to like, comment, and share by the other users (Ex.: TikTok, YouTube, and Instagram).



Image credit: adweek.com



Image credit: help.twitter.com

1.5. **Microblogging** – Can you say your feelings with just 280 characters? This type of social media focuses on short updates from the user (Ex.: Twitter and Plurk).

1.6. **Blogs and Forums** – Unlike the vlog (video log), blog (web log) user posts their own write ups or narratives such as review, diary, or journal on their customized website. Through this blogpost, users can share links to other websites with the other users, and the others can leave comment or reaction. On the other hand, forum is a part of certain website wherein users can hold an online discussion about a certain topic (Ex.: Blogger, WordPress, and Tumblr).



Image credit: dreamhost.com

2. **Convergent Technologies** – In the past, people can access the applications and websites through the personal computer. Due to technological advancement, industry produces devices and gadgets that achieves similar task or goal with the personal computer. (Ex.: When I was a college student, I need to rent a computer at the computer shop to finish my type-written reports and research assignments, but now, I can access, download, and edit my students' research through my smartphone.)



Image credit: Google Images

3. **Mobile Technologies** – Similar with the fashion styles, mobile technologies, such as smartphones and tablets, change and improve not just yearly, but every time. It becomes popular because of its capability to do tasks that were originally found in personal computers. Mobile devices use 4G Networking (LTE) and come along with different operating systems:

- 3.1. **iOs** – for Apple devices
- 3.2. **Android** – an open source operating system developed by Google
- 3.3. **Blackberry OS** – for Blackberry devices
- 3.4. **Windows Phone OS** – a closed source and proprietary operating system developed by Microsoft
- 3.5. **Symbian** – for Nokia devices
- 3.6. **WebOS** – for smart TVs
- 3.7. **Windows Mobile** – developed by Microsoft for smartphones and pocket PCs



Image credit: Google Images

4. **Assistive Media** – Have you watch the movie “Unfriended: Dark Web”? The main character used an assistive media called “Papaya” to communicate with his deaf and mute girlfriend. This trend refers to a group of software and hardware devices to help people with disabilities.

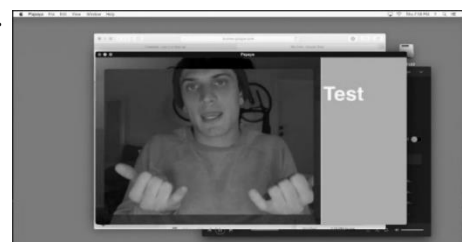


Image from the movie “Unfriended: Dark Web”

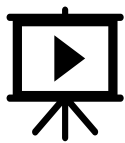
Online Systems, Functions, and Platforms

Due to technological advancement, online versions of information systems were developed. These **online systems** are “the process of and tools for storing, managing, using, and gathering of data and communications in an organization.”

On the other hand, platforms are any hardware or software to host an application. These platforms come with the different functions. One example is the **collaborative platforms**. It is a category of business software that adds broad social networking capabilities to work processes. Another example is the **web search engines** like Google, Bing, and Yahoo. Once these platforms were programmed, it functions and become a tool.



Image credit: Google Images



ACTIVITIES

I. LOGO GAME: Name the 10 social media logos you see in the picture below.

Hint: Most of the answers are mentioned in the lesson.



1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

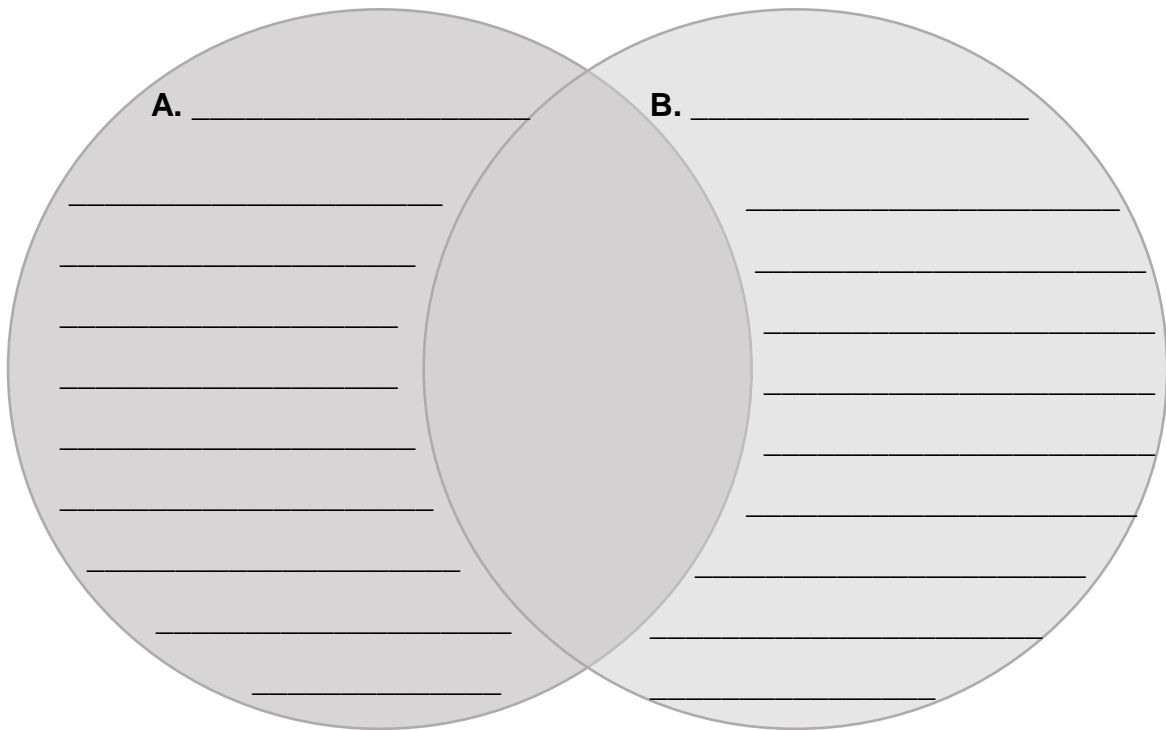
7. _____

8. _____

9. _____

10. _____

II. VENN DIAGRAM: From the lesson above, show the similarities and difference of the two things you learn. Write the differences inside the circle, while the similarities on the lines below the diagram.





TRENDS of ICT			
SOCIAL MEDIA	TECH. CONVERGENT	MOBILE TECH.	ASSISSTIVE MEDIA
1.	1.	1.	1.
2.	2.	2.	2.
3.	3.	3.	3.
4.	4.	4.	4.
5.	5.	5.	5.

[illegible]



POSTTEST

Directions: Encircle the letter that corresponds to the correct answer.

1. Innovation is a common thing in the ICT industry. The _____ media is a non-profit service designed to help the people who have visual and reading impairments.

- A. Assistive
- B. Folksonomy
- C. Blogging
- D. Social

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- C. smart TVs
- D. Apple devices

3. Social Media is a website, application, or online channel that enables web users to create, co-create, discuss, modify, and exchange user-generated content. Which one of the options is NOT an example of social media?

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- B. Media Sharing
- C. Both A and B
- D. None among the option

4. Currently, this is the fastest mobile network.

- A. 2G
- B. 3G
- C. 4G
- D. 5G

5. TikTok is a social media application that can be classified as:

- A. Bookmarking site
- B. Media sharing
- C. Microblogging
- D. Blogs and forums



KEY TO CORRECTION

To check your progress, here are the answers for the following activities:

The answers may varied.	
WRAP-UP and VALUING	
5. B.	1. Twitter
4. C.	2. Instagram
3. D.	3. Friendster
2. D.	4. Google Drive
1. A.	5. Pinterest
PRETEST AND POSTTEST	
LOGO GAME	
10. Plurk	6. Tumblr
9. StumbleUpon	7. WordPress
8. Reddit	

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