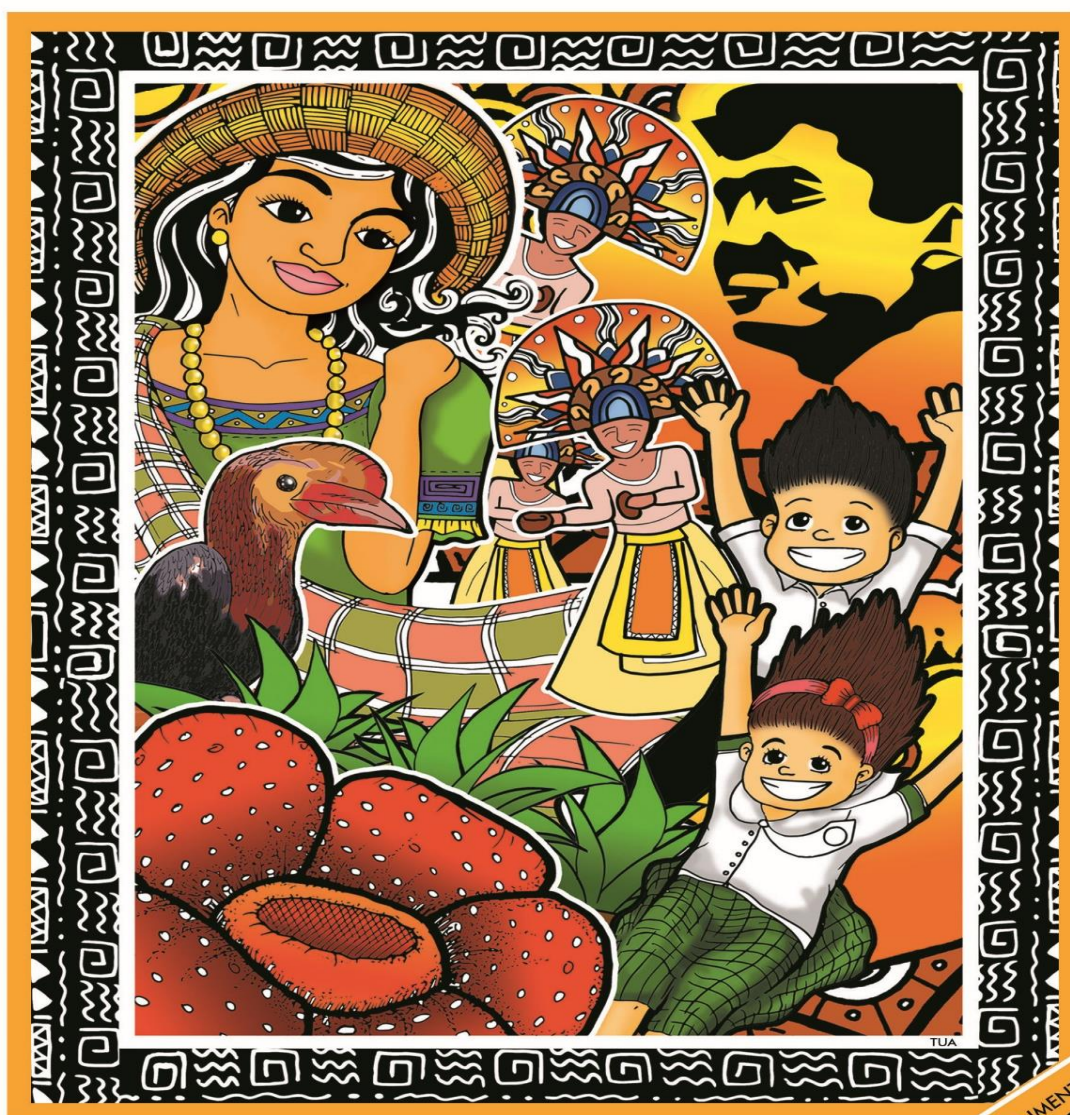




EMPOWERMENT TECHNOLOGIES

Quarter 1 – Module 1:

Information and Communications Technology



SCHOOLS DIVISION OF ANTIQUE

TLE – Grade 11

Alternative Delivery Mode

Quarter 1 – Module 1: Information and Communications Technology
First Edition, 2020

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EMPOWERMENT TECHNOLOGIES

Quarter 1 – Module 1:

Information and Communications Technology

Introductory Message

For the facilitator:

Welcome to the **Empowerment Technologies for Senior High School** Alternative Delivery Mode (ADM) Module on **Information and Communication Technology**.

This module was collaboratively designed, developed and reviewed by educators both from public and private institutions to assist you, the teacher or facilitator in helping the learners meet the standards set by the K to 12 Curriculum while overcoming their personal, social, and economic constraints in schooling.

This learning resource hopes to engage the learners into guided and independent learning activities at their own pace and time. Furthermore, this also aims to help learners acquire the needed 21st century skills 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. Furthermore, 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 for Senior High School** Alternative Delivery Mode (ADM) Module on **Information and Communication Technology**.

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 resource while being an active learner. Furthermore, the problem and home-based project will help for the development of your skills and appreciate the significance of this course in your personal development.

This module has the following parts and corresponding icons:



What I Need to Know

This will give you an idea of the skills or competencies you are expected to learn in the module.



What's In

This is a brief drill or review to help you link the current lesson with the previous one.



What is It

This section provides a brief discussion of the lesson. This aims to help you discover and understand new concepts and skills.



What I Have Learned

This includes questions or blank sentence/paragraph to be filled in to process what you learned from the lesson.



What I Can Do

This section provides an activity which will help you transfer your new knowledge or skill into real life situations or concerns.



Assessment

This is a task which aims to evaluate your level of mastery in achieving the learning competency.



Answer Key

This contains answers to all activities in the module.

At the end of this module you will also find:

References

This is a list of all sources used in developing this module.

The following are some reminders in using this module:

1. Use the module with care. Do not put unnecessary mark/s on any part of the module. Use a separate sheet of paper in answering the exercises.

2. Don't forget to answer *What I Know* before moving on to the other activities included in the module.
3. Read the instruction carefully before doing each task.
4. Observe honesty and integrity in doing the tasks and checking your answers.
5. Finish the task at hand before proceeding to the next.
6. Return this module to your teacher/facilitator once you are through with it.

If you encounter any difficulty in answering the tasks in this module, do not hesitate to consult your teacher or facilitator. Always bear in mind that you are not alone.

We hope that through this material, you will experience meaningful learning and gain deep understanding of the relevant competencies. You can do it!



What I Need to Know

This module was designed and written with you in mind. It is here to help you master the **Information and Communication Technology**. The scope of this module permits it to be used in many different learning situations. The language used allows you to understand the concepts within your vocabulary level. The lessons are arranged to follow the standard sequence of the course. But the order in which you read them can be changed to correspond with the textbook or learning resources you are now using.

The module contains one lesson, namely:

- Lesson 1 – Information and Communication Technology

After going through this module, you are expected to:

1. Differentiate Web 1.0, Web 2.0, Web 3.0 and
2. Compare and contrast the nuances of varied online platforms, sites and content.

LESSON

1

Information and Communication Technology



What's In

Directions: Search the words that are related to ICT. The words have been placed horizontally, vertically or diagonally frontwards or backwards. Write your answers on the separate sheet of paper.

T	W	I	T	T	E	R	O	S	A	T	T	E	L	I
E	S	O	C	I	A	L	N	E	T	W	O	R	K	S
C	O	Y	C	L	S	Y	M	B	I	A	N	O	T	T
H	C	W	M	O	N	W	E	B	S	I	T	E	E	U
N	I	U	C	B	O	M	A	L	W	A	R	E	L	N
O	A	I	H	R	I	D	E	A	I	K	O	P	E	E
L	L	L	A	N	I	A	T	D	O	W	Q	I	P	I
O	O	N	C	O	N	V	E	R	G	E	N	C	E	N
G	V	V	R	S	I	M	O	O	L	B	Y	U	R	S
Y	E	D	M	A	L	B	I	P	A	P	N	T	E	T
S	N	R	S	A	E	M	S	F	D	A	R	P	A	A
A	O	M	I	C	R	O	B	L	O	G	G	I	N	G
W	F	C	A	M	E	R	L	I	A	E	A	R	S	R
R	O	F	T	O	P	S	O	C	Z	O	T	E	D	A
S	I	G	N	I	N	G	G	K	A	O	S	P	A	M

1. _____

6. _____

2. _____

7. _____

3. _____

8. _____

4. _____

9. _____

5. _____

10. _____



What is It

Lesson 1

Information and Communication Technology

As the famous saying goes, “Love makes the world go round”. But you might argue how the Internet has made the world go round for decades before you start searching for someone to fall in love with. Likewise, the Internet has probably made your world go round in the motivation activity. In this lesson we will understand how information and communication technologies in such a short period of time have improved our lives.

What is Information and Communication Technology or ICT?

- It deals with the use of different communication technologies such as mobile phones, Internet and etc. to locate, save, send and edit information.

Having a unified way to communicate is one of the goals of ICT. We spend less because of ICT.

World Wide Web

- The World Wide Web, commonly referred to as WWW or W3, or simply the Web is an interconnected system of public webpages accessible through the Internet. It was invented by Sir Berners-Lee in 1989.
- Web pages are what make up the world wide web and it can either be static or dynamic.



Web 1.0

- Web 1.0 refers to the first stage in the World Wide Web, which was entirely made up of web pages connected by hyperlinks. Although the exact definition of Web 1.0 is a source of debate, it is generally believed to refer to the web when it was a set of static websites that were not yet providing interactive content. In Web 1.0, applications were also generally proprietary

Web 1.0 Examples

- Web Directories
 - Yahoo, Altavista, dmoz
- Web Catalogues
 - Amazon
- Business Directories
 - Alibaba, Yellow page
- Corporate Websites
 - everyone got one
- Personal Pages
 - everyone got one too



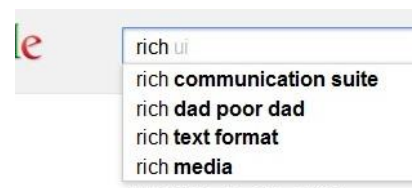
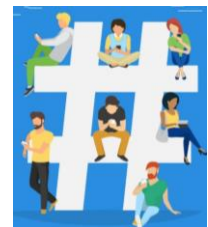
Web 2.0

- Term used to describe the present generation of the World Wide Web that concentrates on its capability of providing people the means to collaborate and share information online
- The second stage in World Wide Web
- Dynamic Website
 - The content of the website changes
- Interactive
 - The user may be able to comment or create user account
- Enables an increased user participation in the web
- Darcy DiNucci, an information architecture consultant, coined the term Web 2.0 in her 1999 article, “Fragmented Future”
- The term was popularized by Tim O’Reilly and Dale Dougherty at the O’Reilly Media Web 2.0 Conference in late 2004 (TechTarget, 2015).

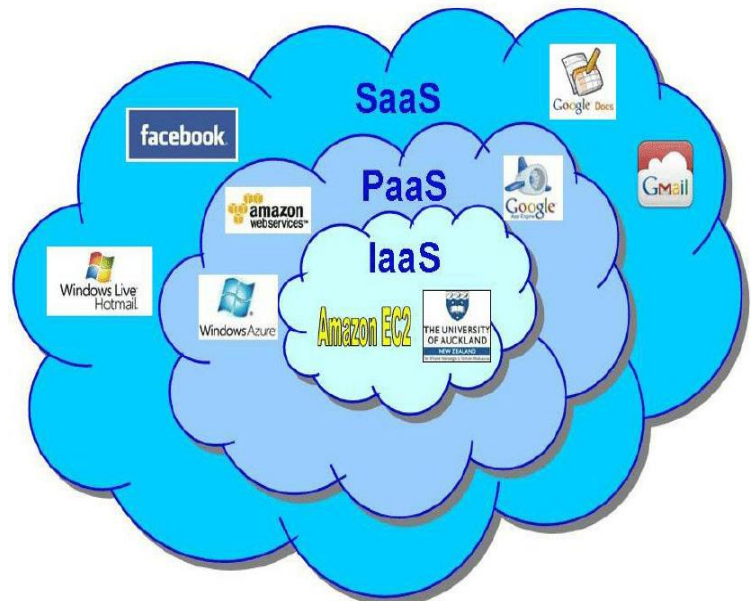


Features of Web 2.0

- **Folksonomy** – It allows users to categorize and classify/arrange information using freely chosen keywords (e.g., tagging). Popular social networking sites such as Twitter, Instagram, Facebook, etc. use tags that start with the pound sign (#). This is also referred to as hashtag.
- **Rich User Experience** – Content is dynamic and is responsive to user’s input. An example would be a website that shows local content. In the case of social networking sites, when logged on, your account is used to modify what you see in their website.
- **User Participation** – The owner of the website is not the only one who is able to put content. Others are able to place a content of their own by means of comment, reviews and evaluation. Some websites allow readers to comment on an article, participate in a poll, or review a specific product (e.g., Amazon.com, online stores).



- **Software as a Service** – Users will subscribe to a software only when needed rather than purchasing them. This is a cheaper option if you do not always need to use a software. For instance, Google Docs is a free web-based application that allows the user to create and edit word processing and spreadsheet documents online. When you need a software, like a Word Processor, you can purchase it for a one-time huge amount and install it in your computer and it is yours forever. Software as a service allows you to “rent” a software for minimal fee.



- **Mass Participation** – It is a diverse information sharing through universal web access. Since most users can use the Internet, Web 2.0's content is based on people from various cultures.



Web 3.0

- Also called as Semantic Web
- Semantics – ability of Web technologies to understand and interpret human-generated content
- The aim of Web 3.0 is to have machines understand the user's preferences to be able to deliver web content specifically targeting the user.
- The internet is able to predict the best possible answers to your question by “learning from your previous choices”



Trends in ICT

As the world of ICT continues to grow, the industry has focused on several innovations. These innovations cater to the needs of the people that benefit most out of ICT. Whether it is for business or personal use, these trends are current from runners in the innovation of ICT.

1. Convergence

- Technological convergence is the combination of two or more different entities of technologies to create a new single device.
- Example: Using of smartphone to create word documents that previously can only be created using a desktop computer.

2. Social Media

- It is a website, application or online channel that enables web users to create, co-create, modify and exchange user-generated content.

Types of Social Media

- **Social Networks** – sites that allow you to connect with other people with same interests or background.
 - Examples: Facebook, Google+
- **Bookmarking Sites** – sites that allow users to store and manage links to various websites and resources, and to tag
 - Examples: StumbleUpon, Pinterest
- **Social News** – sites that allow users to post their own news items or links to other news sources.
 - Examples: reddit, dig
- **Media Sharing** – sites that allow you to upload and share media content like images, music and video.
 - Examples: Flickr, YouTube, Instagram
- **Microblogging** – sites that focus on short updates from the user. Those who are subscribed will receive updates
 - Examples: Twitter Plurk
- **Blogs and Forums** – sites that allow users to post their content.
 - Examples: Blogger, WordPress, Tumblr

3. Mobile Technologies

- The popularity of smartphones and tablets has taken a major rise over the years. This is largely because of the devices' capability to do tasks that were originally found in personal computers.

Different Types of Mobile Operating Systems:

- ✓ **iOS** – used in Apple devices such as the iPhone and iPad
- ✓ **Android** – an open source operating system developed by Google. Being open source means several mobile phone companies use this OS for free.
- ✓ **Blackberry OS** – used in blackberry devices
- ✓ **Windows Phone OS** – a closed source and proprietary operating system developed by Microsoft
- ✓ **Symbian** – the original smartphone OS used by Nokia devices
- ✓ **Windows Mobile** – developed by Microsoft for smartphones and pocket PCs

4. Assistive Media

- It is a nonprofit service designed to help people who have visual and reading impairments. A database of audio recordings is used to read to the user. You may visit <http://assistivemedia.org/> for several of their audio recordings.



What I Have Learned

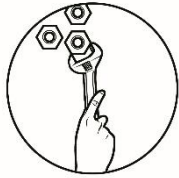
Information and communications technology or ICT is an important part of the Philippine economic growth.

The Philippines is known as Asia's "ICT Hub". When the Internet was created by Tim Berners-Lee, most of the web pages were static, which are now called Web 1.0. A static web is a page with content that cannot be manipulated by the user. On the other hand, a dynamic web page, introduced in Web 2.0, is a page in which its contents depend on the user or the website visitor.

Web 2.0 has many main features, including folksonomy, rich user interface, user interaction, long tail services, web apps and mass participation. Folksonomy deals with information tagging; rich user experience deals with how a site uses user information for a personalized content; user participation means that those who view the website can also put their own information; long tail services on demand as opposed to a one-time purchase; software as a service contains how user would subscribe to a software as opposed to purchasing them; and mass participation deals with diverse information sharing through universal web access. Web 3.0 seeks to enhance Web 2.0 by implementing user-specific content through user

preferences. Nonetheless, Web 3.0 implementation is hindered by several issues, namely compatibility, security, vastness, vagueness and logic.

The trends in ICT include convergence, social media, mobile technologies and assistive learning.



What I Can Do

1. Differentiate Web 1.0, Web 2.0 and Web 3.0 in your own words. Please write your answer in a separate sheet of paper.

WEB 1.0	WEB 2.0	WEB 3.0

2. Compare and contrast the implementations of varied online platforms, sites and content. Write down your insight below. Please use separate sheet of paper for your answer.

Answer:



Assessment

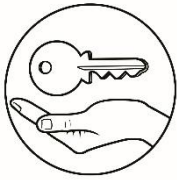
Multiple Choice

I. Instruction: Select the letter of a correct answer.

1. It is an interconnected system of public webpages accessible through the Internet.
 - a. ICT
 - b. World Wide Web
 - c. Social Media
 - d. Web 3.0
2. It deals with the use of different communication technologies such as mobile phones, Internet and etc. to locate, save, send and edit information.
 - a. ICT
 - b. World Wide Web
 - c. Social Media
 - d. Web 3.0
3. Enables an increased user participation in the web.
 - a. Web 1.0
 - b. Web 3.0
 - c. Web 2.0
 - d. Web 4.0
4. Sites that allow users to post their own news items or links to other news sources.
 - a. Social Networks
 - b. Blogs and Forums
 - c. Media Sharing
 - d. Social News
5. The original smartphone OS used by Nokia devices.
 - a. Symbian
 - b. iOS
 - c. Android
 - d. Blackberry OS

II. Identification. Write **SO** if the **social media** website is a social network, **BS** for **bookmarking site**, **SN** for **social news**, **MS** for **media sharing**, **MI** for **microblogging**, and **BF** for **blogs and forums**.

1. Facebook
2. Blogger
3. Twitter
4. Reddit
5. WordPress
6. Google+
7. Instagram
8. Pinterest
9. YouTube
10. Flickr



Answer Key

I.	1.c
	2.a
	3.c
	4.d
	5.a
II.	
	1. SO
	2. BF
	3. MI
	4. SN
	5. BF
	6. SO
	7. MS
	8. BS
	9. MS
	10. MS

References

<https://www.techopedia.com/definition/27960/web-10>

https://www.google.com/search?q=folksonomy&tbm=isch&ved=2ahUKEwiujtG_w5fsAhWDzYsBHTcgBKQQ2-

[cCegQIABAA&oq=Folk&gs_lcp=CgNpbWcQARgAMgQIABBDMgQIABBDMgQIABBDMgQIABBDMgQIABCDMgcIABCxAXBDMgcIABCxAXBDMgQIABBDMgUIABCxAZIHCAAQsQMQQzIECAAQQzoCCABQ_qgHWNutB2D_vgdoAHAAeACAAdIBiAHtBZIBBTauMy4xmAEAoAEBqgELZ3dzLXdpei1pbWfAAQE&sclient=img&ei=KvZ3X67RJ4Obr7wPt8CQoAo&bih=618&biw=1366#imgsrc=NQxftzJEQUYYuM](https://www.google.com/search?q=folksonomy&tbm=isch&ved=2ahUKEwiujtG_w5fsAhWDzYsBHTcgBKQQ2-cCegQIABAA&oq=Folk&gs_lcp=CgNpbWcQARgAMgQIABBDMgQIABBDMgQIABBDMgQIABBDMgQIABCDMgcIABCxAXBDMgcIABCxAXBDMgQIABBDMgUIABCxAZIHCAAQsQMQQzIECAAQQzoCCABQ_qgHWNutB2D_vgdoAHAAeACAAdIBiAHtBZIBBTauMy4xmAEAoAEBqgELZ3dzLXdpei1pbWfAAQE&sclient=img&ei=KvZ3X67RJ4Obr7wPt8CQoAo&bih=618&biw=1366#imgsrc=NQxftzJEQUYYuM)

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