

TECHNICAL VOCATIONAL LIVELIHOOD

12

QUARTER

2

MEDIA AND INFORMATION LITERACY



Media and Information Literacy – Grade 12
Quarter 2 – Module 4: Current and Future Trends of Media and Information
(Part 2)
First Edition, 2020

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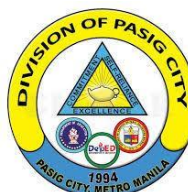
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Media and Information Literacy

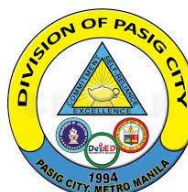
12

QUARTER 2

MODULE

4

Current and Future Trends of
Media and Information (Part 2)



Introductory Message

For the Facilitator:

Welcome to the Media and Information Literacy – Grade 12 Self-Learning Module on Current and Future Trends of Media and Information (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 Media and Information Literacy Self-Learning Module on
Current and Future Trends of Media and Information (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.





- A. describe massive open on-line;
- B. evaluate current trends in media and information and how it will affect/how they affect individuals and the society as a whole;
- C. predict future media innovation.



- What is the earliest known wearable technology?
 - abacus
 - smart watch
 - abacus ring
 - smart ring
- It shapes the way we relax, interact, and communicate and even do business.
 - technological advancement
 - virtual reality
 - social networks
 - networking
- This type of technology produces a human-computer interaction.
 - 3D environment
 - virtual classroom
 - hologram
 - wearable technology
- An example of wearable technology is _____.
 - Apple watch
 - iPhone watch
 - digital watch
 - wall clock
- Below are the industries benefiting from modern technologies except from _____.
 - retail
 - medicine
 - military
 - none of the above



The diagram illustrates the spectrum of educational technology. At the top, three images represent different classroom environments: a traditional face-to-face classroom, a blended classroom with students using laptops, and a fully online distance learning environment. Below these images is a horizontal double-headed arrow labeled "blended". Underneath the arrow, five terms are listed: "face-to-face" (green), "classroom aids" (red), "flipped" (red), "hybrid" (red), and "fully online (distance)" (blue). At the bottom, another horizontal double-headed arrow is labeled "no technology" on the left and "all technology" on the right. The word "(delivery)" is centered below the bottom arrow.



Blank lined area for notes.



LESSON

CURRENT AND FUTURE TRENDS OF MEDIA AND INFORMATION (PART 2)

- a. Massive Open Online Content (MOOC)
- b. Ubiquitous Learning
- c. Wearable technology (i.e. Google Glass Enterprise Edition 2, Apple watch, etc.)
- d. 3D Environment (i.e. 3D printer, 3D films, holograms, etc.)

The technological advancement or modern technology we see today shapes the way we relax, interact, and communicate and even do business. It does not only help and improve the education sector but also other fields such as business, medicine and healthcare, etc. The following are the trends dominating the world today.

Wearable Technology

Wearable technologies also known as wearables connect people to their devices. This type of technology produces a human-computer interaction which facilitates mobility and connectivity for users (Burmaoglu, et al., 2018). Users can conveniently access information and communicate with other people while they are moving from one place to another. Therefore, this technology offers a one-step higher multi-tasking ability.

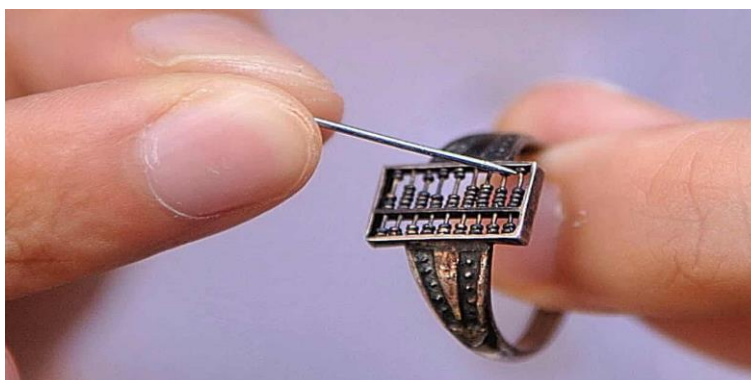
The earliest reported wearable technology was abacus ring embedded with a silver abacus, a relic from the Qing Dynasty in China (1644-1912). In today's generation, wearable technologies consist of Google Glass Enterprise Edition 2, Apple Watch, etc.



Industry	Product types	Body location
<ul style="list-style-type: none"> Healthcare & medical Fitness & wellness Infotainment Commercial Industrial Military Other Multi-sector 	<ul style="list-style-type: none"> Smartwatches <ul style="list-style-type: none"> Including case studies on product evolution relative to the future of smartphones and new standalone personal communication devices Fitness trackers <ul style="list-style-type: none"> Including wrist-worn (in two separate categories), chest worn, the move to apparel and other form factors (clip-on, ear-worn, etc.) Smart eyewear <ul style="list-style-type: none"> Including virtual reality (VR), augmented (AR) and mixed reality, smart contact lenses Smart clothing: <ul style="list-style-type: none"> Including elite sportswear, consumer sports apparel, heated apparel, chest straps, medical apparel, fashion apparel, workwear monitoring apparel, military apparel and others Medical devices: <ul style="list-style-type: none"> Including breakdown by disease vertical, e.g. diabetes (sensors & pumps), cardiovascular treatments and monitoring, skin patches (physical, chemical, body area mapping), contact lenses (glaucoma, diabetes, etc.), hearing aids, neurological treatments, diagnostics devices, and others Other infotainment devices: <ul style="list-style-type: none"> Including headphones (basic and smart, low and high end) and electronic watches 	<ul style="list-style-type: none"> Head Ear Eyes Body (torso) Arms Wrist Legs & feet Implantable Multi-location / adaptability by user or use case

The table shows the IDTechEx analysis and forecasting across 39 categories of wearable technology device, segmented by product type, industry and location on the body.

Examples of Wearable Technology



Abacus ring embedded with a silver abacus, the earliest reported wearables

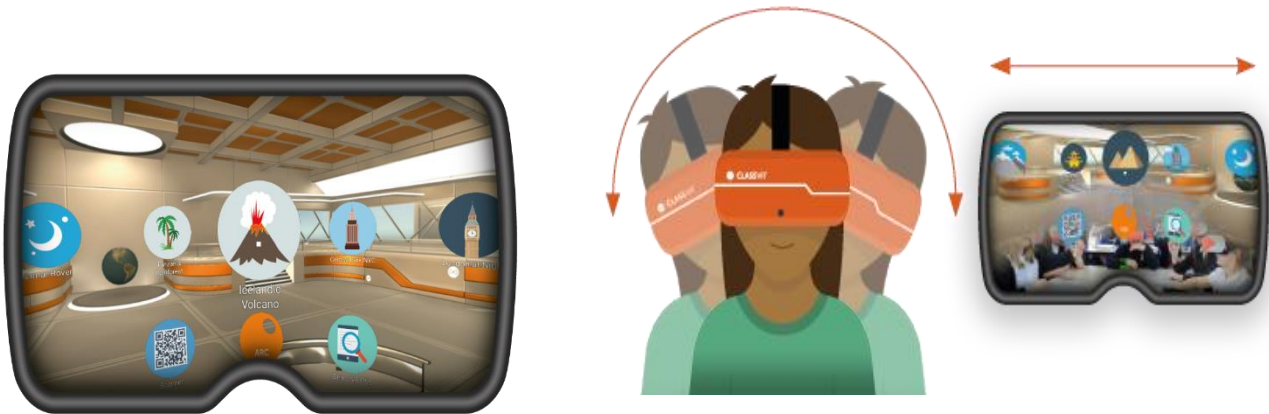


Google markets Google Glass Enterprise Edition 2 as “Glass is a small, lightweight wearable computer with a transparent display for hands-free work.”

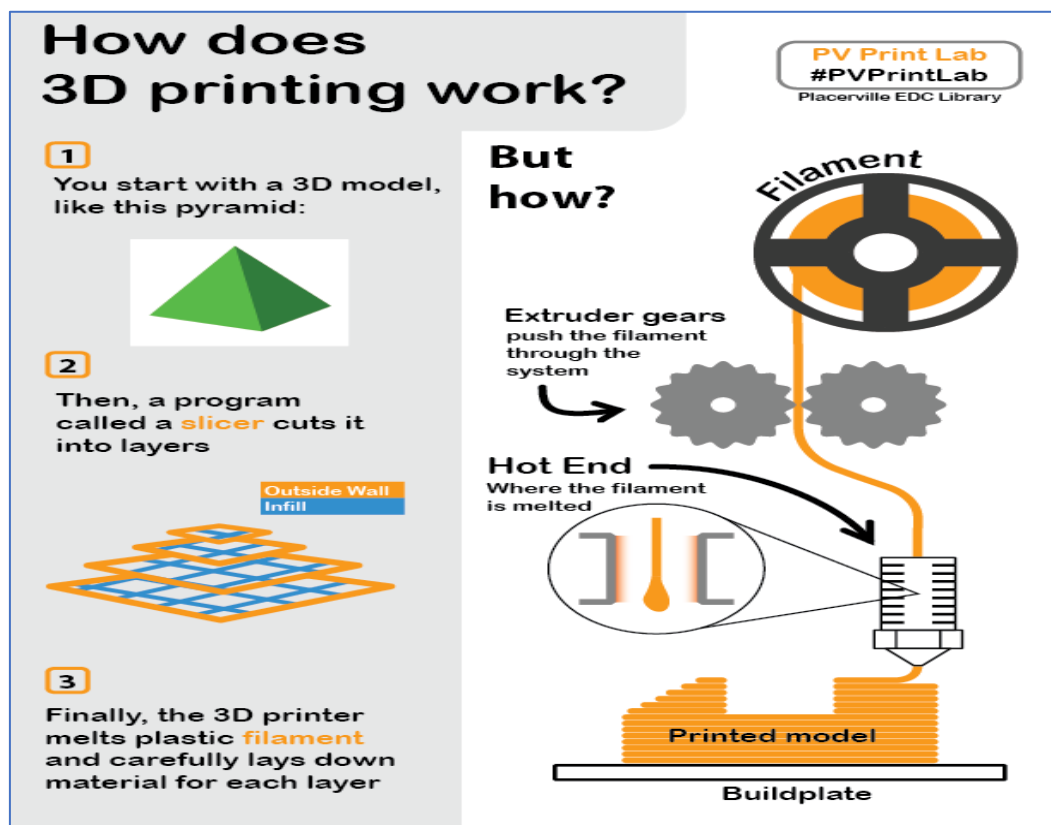
3D Environment

3D environment is also known as interactive 3D or real-time 3D. This technology provides an environment wherein the user can explore and interact with the digital world the same way he or she explores and interacts in the digital world. 3D environment is widely used in entertainment, retail, healthcare, manufacturing, design, and even in education.

'Holodeck' is the heart of the ClassVR interface. It showcases a futuristic room. The virtual room has icons depicting classroom experiences and activities both useful for teachers and students.



ClassVR interface and Holodeck gestures to navigate the virtual classroom



The 3D printing process





ACTIVITIES

ACTIVITY: PROTOTYPING

1. Identify problems or issues that is related to media and information in the Philippines.

2. Among the identified problems, select which you think needed an immediate attention. Identify what causes the problem and what are the possible ways to solve it.

3. Design a technology tool that will provide the needed solution to the discussed issue or problem. You can draw or create a prototype of your technology tool.





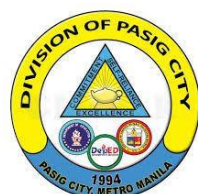
WRAP-UP

Which of the discussed trends (MOOC, ubiquitous learning, wearable technology, 3D environment) in media and information do you think will have the most impact or influence to people and to the society as a whole? Why?



VALUING

Caloocan uses quarantine wristbands to monitor contacts of COVID cases. According to Sikini Labastilla, head of Caloocan COVID-19 Command Center, “We need a way to contain them in their homes or their quarantine facility. The best that we can do right now is through this technology. We use the phone to scan,” What trend or technological advancement does Caloocan use? Is this an effective way of flattening COVID-19 curve? Explain your answer.





POSTTEST

Direction: Identify whether each statement is True or False.

- _____ 1. Virtual classroom is useful for students and teachers.
- _____ 2. 3D environment is only useful for the education sector.
- _____ 3. Wearable technologies connect people to their loved ones.
- _____ 4. Multitasking ability is one of the benefits of modern technology.
- _____ 5. Wearables facilitate mobility and connectivity for users.





KEY TO CORRECTION

PRE-TEST	1. C	Answers may vary	1. True	POST-TEST
	2. A		2. False	
	3. D		3. False	
	4. A		4. True	
	5. D		5. True	

References

Andres, V. et al. *Teaching Guide for Senior High School Media and Information Literacy*, Quezon City: Commission on Higher Education. 2016.

Avantis Systems Ltd. *A Virtual Reality User Interface Made for Education*, 2020
<https://www.classvr.com/school-virtual-reality/education-student-vr-interface/>

BuiltIn, *What is Wearable Technology?* 2019. <https://builtin.com/wearables>

Burmaoglu, S. et al. *Evolution Map of Wearable Technology Patents for Healthcare Field*. *Wearable Technology in Medicine and Health Care*, 2018.
<https://www.sciencedirect.com/topics/engineering/wearable-technology>

Guardian News & Media Limited, *10 Most Influential Wearable Devices*, 2020.
<https://www.theguardian.com/technology/2017/mar/03/10-most-influential-wearable-devices>

Hayward, J. *Wearable Technology 2017-2027: Markets, Players, Forecasts*, 2020.
<http://www.idtechex.com/en/research-report/wearable-technology-2017-2027-markets-players-forecasts/536>

MSN News. *Caloocan launches 'quarantine wristbands' to monitor contacts of COVID cases*, 2020. <https://www.msn.com/en-ph/news/national/caloocan-launches-quarantine-wristbands-to-monitor-contacts-of-covid-cases/ar-BB18KMsx>

Ping, A. "Current and Future Trends of Media and Information." Lecture, St. Stephen's High School, Manila, Philippines, February 10, 2017.

Ramsay, J. *Best 3D Printer for Miniatures of 2020*, 2019.
<https://medium.com/reviewmeister/3d-printer-for-miniatures-e90a539e9840>

Unreal Engine. *What is Interactive 3D?* 2019. <https://www.unrealengine.com/en-US/blog/what-is-interactive-3d>

