



DEPARTMENT OF EDUCATION
SCHOOLS DIVISION OF NEGROS ORIENTAL
REGION VII

Kagawasan Ave., Daro, Dumaguete City, Negros Oriental



**Trends, Networks, and Critical Thinking
in the 21st Century**
Quarter 4 – Module 3ab:
**Enabling and Inhibiting Dimensions of
Technology**



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**Trends, Networks, and Critical Thinking in the 21st Century – Grade 11
Alternative Delivery Mode
Quarter 4 – Module 3ab: Enabling and Inhibiting Dimensions of Technology**

First Edition, 2020

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What I Need to Know

This Learning Module is an alternative instructional design that uses developed instructional materials which are based on the needs of the students. They are encouraged to independently work on the different activities which will develop them to be productive people in the society.

This course presents some relevant information about the enabling and inhibiting dimensions of technology which can be applied in facing challenges in our world today. You shall be able to learn some skills and ideas that you may use for your daily living in this democratic society. By studying this module, you will learn not to abuse the independence you have and appreciate the value of technology in improving the quality of life. You will also become a productive citizen by understanding your role in this democratic world. Thus, you could be an influence of “change for the better” in our challenging world.

Happy learning!

Content Standard

The learner understands how ICT enslaves, emancipates, and empowers individuals.

Performance Standard

The learner organizes and mobilizes an event that deals with a significant global issue, using ICT.

Most Essential Learning Competencies

The learner is expected to:

1. Identify the dimensions of technology that are enabling and inhibiting (**HUMSS_MCT12-IIId-f-1**)
2. Discuss the benefits of technology (**HUMSS_MCT12-IIId-f-2**)

At the end of the module, you are expected to:

1. Appreciate the different uses of technology and its issues;
2. Identify technologies that are important in human lives; and
3. Categorize the value of technology in today's modern world and address issues in a positive way.

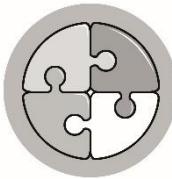


What I Know

Direction: Read each item carefully and write **TRUE** if the statement is correct and **FALSE** if the statement is incorrect. Write your answers in your notebook.

True or False

1. Information communication technology answers most of the problems in communication dissemination faster.
2. Technology can solve urban crisis through new information and communication infrastructures.
3. Information technologies have contributed to the increase in the concentration of access to information, decision – making and control.
4. Information communication technology is the growing discovery in the 21st century that helps in the interaction of countries from one another.
5. Technology is a necessity.
6. Technology has taken over the lives of many people.
7. Social Media consumes all our time.
8. Likes and comments quantity will make a person contented for a day.
9. Technology can be used in various ways to facilitate business organizations.
10. Technology helps to speed up the learning process for students.



What's In

Task 1: PICTURE ANALYSIS: Answer the questions by analyzing the content of the picture provided below. Write your answers in your notebook.



<https://medium.com/@OECD/the-digital-world-we-want-6095423e804d>

1. What can you say about the picture?
2. What is it all about?
3. Does the picture have something to do with technology? Support your answer.



What's New

Briefly answer the following questions: Write your answers in your notebook.

1. What do you think are the positive contribution of Technology in today's modern world?
2. Do you think technology is now a necessity?
3. Can you compare the technology in the past with the ones that we have now? Please elaborate.
4. How was Information Technology able to help you with your studies?



What Is It

INTRODUCTION

Twenty-first century learning has been defined by application and advancement in information technology or IT. Information technology has become an essential part of education. According to *Information Technology*

Association of America, information technology is defined as “the study, design, development, application, implementation, support or management of computer-based information systems” which serves as a big help both for the teachers and learners.

Integrating technology in education is imperative for it is one way to encourage the learners to be more interested in the subject they are studying. It can encourage a more active participation in the learning process which can be hard to achieve through a traditional lecture environment and hence, provides different opportunities to make learning more fun, interactive and enriching.

Emerging technologies show many challenges to the traditional system. Nanotechnology, biotechnology and robotics are not limited to an individual organization like many older technologies such as motor vehicles, pharmaceuticals and others but rather, to a multiple of industries and application companies. These controlled sectors and applications create a complication of regulatory efforts in determining the risks and control costs of these technology – life cycles.

Emerging technologies further show an unprecedented vagueness parallel to the risks they bring, advantages, and upcoming growth while *traditional technologies* possess toxicity which may not be in the case of nanomaterials. Some genetically altered food products can be risky to the welfare of public health and the environment. Information technology has served as a major catalyst of change and innovation in different aspect of business and society. It has proven game changer in resolving economic and social issues.

As the proliferation of technology in the classroom continues to accelerate, schools that haven’t yet implemented some of the latest and greatest devices such as computers in the classroom are starting to really feel the pressure to cope with the fast changing world. Mobile devices can make perfect learning tools and open up unlimited possibilities for educators and students alike, but it’s not all daisies and roses. Sometimes the initial infatuation with the shiny new technology turns into a love-hate relationship as problems and issues arise.

POTENTIAL ISSUES TO LOOK OUT FOR WHEN BRINGING TECHNOLOGY IN EDUCATION

Students Using Social Media

Of course, teachers are afraid that their students may just play around on social media instead of using their devices for educational purposes. Today’s kids spend quite a bit of time on Facebook, mobile games, other social networking sites, etc.

Security Breach

Students are oftentimes more curious than they are malicious. They want to push the boundaries just to see if they can. If you're network allows them access to the admin servers, you can bet they're going to get on it.

Cheating

At one time a student had to pull a paper written "cheat sheet" out of their pocket to have the ability to cheat. It certainly seems easier that they can now cleverly pull up a "cheat sheet" on their device. The good news is, with the ever-evolving change in technology, software companies are developing ways to alleviate the cheating problem by for example, allowing teachers and administrator's access to students' screens while in the classroom.

Gaming

There are a ton of free gaming apps out there and people love them, especially the learners. These addicting games can be quite the distraction and take away from productivity in learning.

Information technologies have contributed to the increase in the concentration of access to information, decision – making and control. They have accelerated the crisis in employment through labor substitution and have intensified the competitive processes in both economic and social spheres. Their development has sustained the belief that the urban crisis can be resolved through new information and communication infrastructures.

Technology has taken over the lives of many people who spend way too much time on social media just trying to see how many likes and comments they have on their Facebook or Instagram posts. People think of social media when someone is looking at their phone, or when someone mentions technology. They forget all the amazing things other than social media that technology has brought to us. Technology has allowed parents not to be in the dark when it comes to being aware as to where their children are. It has allowed people away from their own countries to contact their loved ones and even see them through video calls. But technology has enslaved us and has controlled our lives in some other ways as well.

Technology has been lauded as a way to free up time for us, yet the reality of all of these – consuming medium often does the reverse. New innovations bring with them a host of unintended consequences, ranging from the troubling to the downright depressing. Social media makes us lonely. Too much screen – time makes teenagers fall behind their peers. And at the more feeble end of the spectrum, many of us have walked into an obstacle while texting. Tech innovators frequently profess aspirations to improve the lot of mankind. Such aspirations are admirable, but we shouldn't forget that there's one rather more concrete intention they share: to make money. They're vendors, we're consumers: it's simple as that.

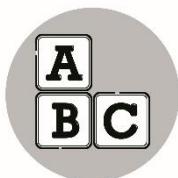
But even if tech companies aren't really trying to enslave us, or to make us feel inadequate, that doesn't mean that the current situation is a case of good intentions gone awry. There's no more reason to think that technology is intrinsically good, but occasionally getting it wrong, than there is to think that it's a remarkably successful villain.

Technology can be used in various ways to facilitate business organizations. For example, technology can be used to organize information. It can be used to aid data transfer and information flow within an organization. Technology can also be used to process, track and organize business records. IT indeed has countless of advantages in the field of business and commerce. It helps businesses automate most tasks and this process results in increased production and efficiency. Business can automate tasks in the accounting department by using accounting software like QuickBooks.

Technology helps to speed up the learning process for students because it creates a more efficient learning environment in many ways. Moreover, technology can also be an important part of one's life for many other reasons aside from education.

Technology has important effects on business operations. Regardless of the size of your enterprise, technology has both tangible and intangible benefits that will help you make money and produce the results that your customers demand. Technological infrastructures affect the culture, efficiency and relationships within a business. Technology has the ability to enhance relationships among teachers, students and even the community. When teachers effectively integrate technology into varied subject areas, teachers grow into roles of adviser, content expert, and coach.

Technology helps make teaching and learning more meaningful and fun. Technology is in many ways like its own form of entertainment. However, for people with disabilities, technology can be so much more than just entertainment. It can change their lives. It can help them learn and enable them to do things they wouldn't otherwise be able to do.



What's More

Time to Explore: Perform the three (3) activities provided below to enhance one's knowledge and awareness about the dimensions of Information Technology. Have this in your activity notebook.

I. **Beyond the Walls**

Choose one (1) current event and compare the information to different news reports. This is good for 5 points. (i.e., TV Patrol, Rappler, GMA News, TV 5, etc.)

II. **Cut Out**

Cut pictures where you think technology helps a lot in improving the quality of life. Paste it in a bond paper and put a caption/s for each picture. (5 points)

III. **Let's Face It**

How can we prevent ourselves from being enslaved by the internet?



What I Have Learned



I have learned that _____

I have realized that _____

I will apply _____



What I Can Do

Task 2: Share your Ideas

1. In your own point of view, what is the most important technological advancement that man ever made? Why?

2. Share your views about SOCIAL MEDIA and how this affects human beings in dealing with others.
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Assessment

Direction: Read each item carefully and write **TRUE** if the statement is correct and **FALSE** if the statement is incorrect. Write your answers in your notebook.

True or False

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Additional Activities

“Interventor on the Making!”

If given the chance to invent something in the future, what would it be and why? Have your drawing in your activity notebook and don't forget to include a short description of your intention with regards to your proposed invention.

Rubrics:

Creativity	15
Level of Innovation	25
Neatness	10
Total	50



The following terms used in this module are defined as follows:

1. Culture - the characteristics and knowledge of a particular group of people, encompassing language, religion, cuisine, social habits, music and arts.
2. Enabling - making something possible or easier
3. Global issue - a global issue is any issue (problem, risk) that adversely affects the global community and environment, possibly in a catastrophic way, including environmental issues, political crisis, social issues and economic crisis
4. Information technology - the application of technology to solve business or organizational problems on a broad scale; the use

of computers to store, retrieve, transmit, and manipulate data or information

5. Inhibiting - to prohibit from doing something
6. Intangible - Unable to be touched; not having physical presence
7. Social Media - is computer-based technology that facilitates the sharing of ideas, thoughts, and information through the building of virtual networks and communities
8. Tangible - to touch and it simply means something that can be touched or felt
9. Technology – the discipline dealing with the art or science of applying scientific knowledge to practical problems
10. Twenty-first century - is the accumulation of knowledge, work habits and soft skills, including digital literacy, critical thinking and problem-solving, that will help students lead successful careers in the modern workplace.



Answer Key

<i>What I Know/ Assessment</i>	<i>Beyond the Walls</i>	<i>Cut Out</i>	<i>Cut Out</i>
1. True 2. True 3. True 4. True 5. True 6. True 7. False 8. False 9. True 10. True	Answer may vary Answer may vary	III. II. I.	III. II. I.

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