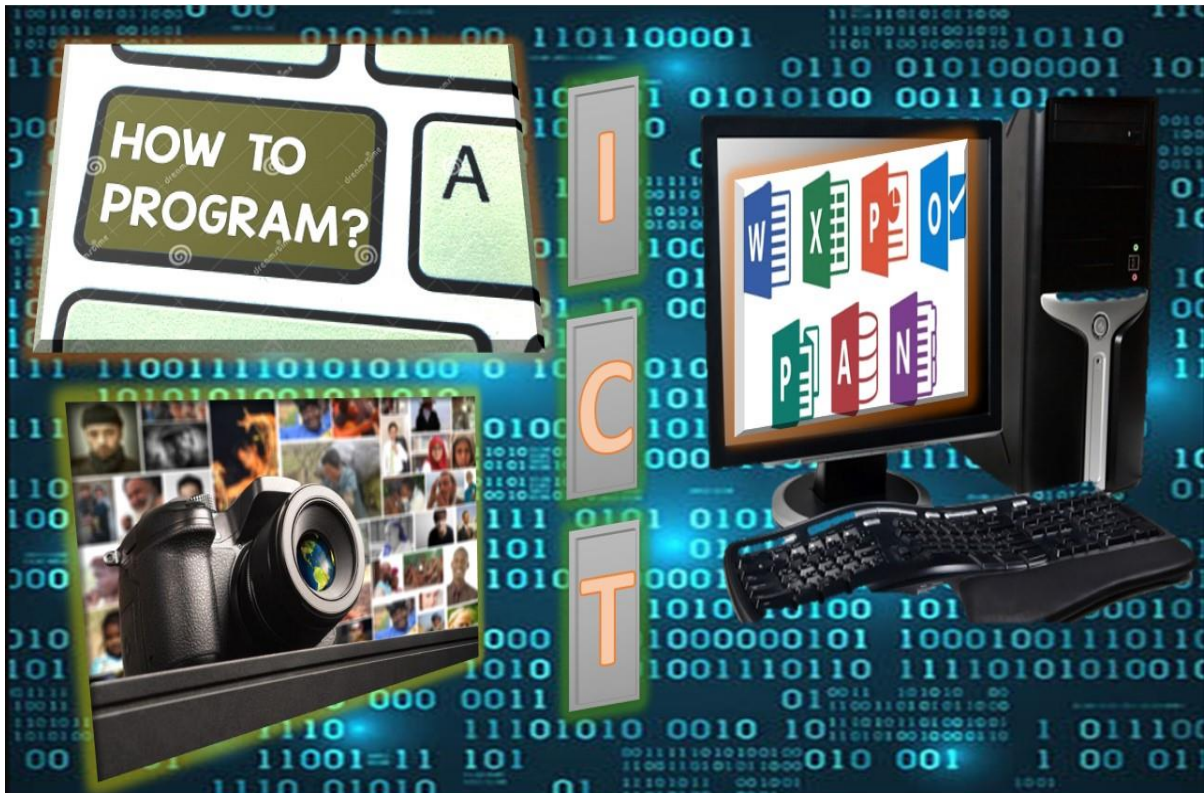


# 10



## ICT 10 Activity Sheet Quarter 3 | Weeks 5-6

### Basic functions of a Video Camera



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**WRITERS**

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# ***Introductory Message***

Welcome to ICT 10!

The **Learning Activity Sheet** is self-directed instructional materials aimed to guide the learners in accomplishing activities at their own pace and time using the contextualized resources in the community. This will also assist the learners in acquiring the lifelong learning skills, knowledge and attitudes for productivity and employment.

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## **For learning facilitator:**

The **ICT 10 Activity Sheet** will help you facilitate the leaching-learning activities specified in each Most Essential Learning Competency (MELC) with minimal or no face-to-face encounter between you and learner. This will be made available to the learners with the references/links to ease the independent learning.

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## **For the learner:**

The **ICT 10 Activity Sheet** is developed to help you continue learning even if you are not in school. This learning material provides you with meaningful and engaging activities for independent learning. Being an active learner, carefully read and understand the instructions then perform the activities and answer the assessments. This will be returned to your facilitator on the agreed schedule.

**Name of Learner:** \_\_\_\_\_ **Grade and Section:** \_\_\_\_\_  
**School:** \_\_\_\_\_ **Date:** \_\_\_\_\_

## ICT 10 ACTIVITY SHEET

### Basic functions of a camera

### ***Learning Competency:***

- 1.1 Identify the basic function of the camera.
- 1.2 Demonstrate understanding of basic camera operations.

Support Competencies:

1. Explain what is a video camera.
2. Describe the basic functions of zoom, focus, iris, and audio.
3. Describe the camera set-up and its operation.

## **Background information for the learners**

One important equipment in producing a video or film is with the use of a video camera. Capturing the media needed to produce a video takes place during the production stage.

In this lesson, you will learn the basic functions of a video camera. You will also be guided on how to operate a video camera.

### **Activity Proper.**

#### **Activity 1**

##### **What is a Video camera?**

- Video camera is a camera used for acquisition of motion pictures.
- a camera for recording images on videotape or for transmitting them to a monitor screen.
- It was initially developed for television industry but now it is common for many applications as well.

##### **Basic Functions of a Video camera**

#### **ZOOM**

This is the function which moves your point of view closer to, or further away from the subject. The effect is similar to moving the camera closer or further away.

Note that the further you zoom in, the more difficult it is to keep the picture steady. In some cases you can move the camera closer to the subject and then zoom out so you have basically the same framing. For long zooms you should use a tripod.



#### **FOCUS**

Professional cameras usually have a manual focus ring at the front of the lens housing. Turn the ring *clockwise* for *c*loser focus, anti-clockwise for more distant focus.

Consumer cameras have different types of focus mechanisms — usually a small dial.

To obtain the best focus, zoom in as close as you can on the subject you wish to focus on, adjust the ring until the focus is sharp, then zoom out to the required framing.



## IRIS

This is an adjustable opening (aperture), which controls the amount of light coming through the lens (i.e. the "exposure"). As you open the iris, more light comes in and the picture appears brighter.

Professional cameras have an iris ring on the lens housing, which you turn *clockwise* to *close* and *anticlockwise* to *open*. Consumer-level cameras usually use either a dial or a set of buttons.



The rule of thumb for iris control is: *Set your exposure for the subject*. Other parts of the picture can be too bright or darks, as long as the subject is easy to see.

## WHITE BALANCE

*White balance* means colour balance. It's a function which tells the camera what each colour should look like, by giving it a "true white" reference. If the camera knows what white looks like, then it will know what all other colours look like.

This function is normally done automatically by consumer-level cameras without the operator even being aware of its existence. It actually works very well in most situations, but there will be some conditions that the auto-white won't like. In these situations the colours will seem wrong or unnatural.



## AUDIO

- Virtually all consumer-level cameras come with built-in microphones, usually hi-fi stereo.
- The level at which your audio is recorded is important. Most cameras have an "auto-gain control", which adjusts the audio level automatically. Consumer-level cameras are usually set up like this, and it works well in most situations.
- If possible, try to keep the background (ambient) noise level more or less consistent. This adds smoothness to the flow of the production. Some shots will require sudden changes in ambient audio for effect.
- Be very wary of background music while shooting — this can result in music that jumps every time the shot changes, like listening to a badly scratched record. If you can, turn the music right down or off.
- Many cameras have a "low-cut filter", sometimes referred to as a "wind-noise filter". You can use a purpose-designed wind sock, to block the wind.

### **Answer the question below:**

*Determine what function of a camera does each of the following statements below describe.*

- \_\_\_\_\_ 1. This function allows us to go closer and distant to the subject.
- \_\_\_\_\_ 2. *Reveal colors in their true form.*
- \_\_\_\_\_ 3. This function of a can be rotated to allow users to manually focus the camera.
- \_\_\_\_\_ 4. This function of a camera will display all colours correctly.
- \_\_\_\_\_ 5. This function of a camera uses microphones that captures and records sounds clearly and effectively.
- \_\_\_\_\_ 6. *Controls the amount light coming throught the lens.*

## Activity 2.

In this activity, you will watch a video that will demonstrate how to operate a video camera.

### Link.

[https://www.youtube.com/watch?v=koKmK\\_Q2VjQ](https://www.youtube.com/watch?v=koKmK_Q2VjQ)

After watching the video, answer the question below:

1. Enumerate and discuss what are the important things that you need consider when you operate a video camera.

## Activity 3.

Answer the following questions.

1. How does an iris mechanism work?
2. What is the importance of white balance in video production?
3. Why is camera focus important?
4. Why is sound important in a video?

## Reflection.

**Complete the statements below.**

I understand \_\_\_\_\_

I don't understand \_\_\_\_\_

I need more information about \_\_\_\_\_



## ***Links and/or Other References***

<https://www.mediacollege.com/video/camera/tutorial/01-functions.html>

<https://www.youtube.com/watch?v=Eph6UI15n40> [https://www.youtube.com/watch?v=wi8\\_dnYXOJw&t=41s](https://www.youtube.com/watch?v=wi8_dnYXOJw&t=41s)

<https://www.slideshare.net/skayani/video-camera-basic-functions-shot-types-aspect-ratio>

<https://www.loyelmedia.com/video-production-process/>