

# Basic Computer Skills Competency Levels for Students

## Entry Criteria

1. Student is willing to go through the proposed ICT literacy training, and will be available for the duration of the training.
2. Student has access to system with an operating system installed (with relevant language support if required, and some basic software e.g., a word processor) and connected to a network with Internet access.

## Exit Criteria

1. Student is familiar with basic computer terminology.
2. Student has basic computer skills.
3. Student knows how to use computer peripheral devices.
4. Student is familiar with general OS use (filing systems etc.).

## Competency Levels

### Level 1:

**Student is aware of the concept of computer and is familiar with different components of the computer.**

1. The student should be aware of the simple concept of a computer.
2. The student should be aware of the primary benefits of using a computer.
3. The student should be aware of different components of a computer system and peripheral devices (monitor, mouse) – basically anything that you can see as part of a computer system.

### Level 2:

**The student can use the four functions of a computer (described in level 2) and therefore knows how to operate the computer.**

1. The student can:
  - a. Turn the computer on.
  - b. Log in with a user name and password.
  - c. Lock the computer.
  - d. Unlock the computer.
  - e. Log off.
  - f. Shut down the computer.
  - g. Reboot the computer.
2. The student should be able to use the four basic operations of a computer:
  - a. Input: The student is able to use basic input devices like the mouse and keyboard.
  - b. Processing: The student is able to conduct simple processing operations.
  - c. Output: The student is able to use basic output devices like the monitor and printer.
  - d. Storage & Retrieval: The student is able to perform simple storage and retrieval tasks (e.g., saving and then opening a document)

### Level 3:

**Student is aware of the concepts of data and information and is aware of the four main functions performed by a computer.**

1. Student is familiar with the concept of data and information, and knows the difference between the two.
2. The student is aware of the four functions performed by a computer:

- a. **Input:** The student should be aware that data can be input to a computer, and should be aware of basic input devices like the mouse and keyboard. The student should also be aware of other input devices like scanners, bar code readers etc.
- b. **Processing:** The student should be aware that the main function of a computer is to process data and also that the input data is changed through processing. The student should be aware of computing device(processor, motherboard)
- c. **Output:** The student should be aware that one of the basic functionalities of a computer is to output data and that data can be output in many forms. The student should be aware of basic output devices like the monitor and printer, and also other devices (speakers etc.).
- d. **Storage & Retrieval:** The student should be aware that the fourth functionality of computers is the storage and retrieval of data. Students should be aware of basic storage devices like RAM, hard disks, cds, flash drives etc that are currently in use.

**Level 4:**

**The student is aware of computing architecture layers of the computer.**

1. The student should be aware of the concepts of hardware and software. The student should know that hardware is the term used to refer to the physical components of a system and that software is the term used to refer to sets of instructions for the computer. Students should be aware of the relation between hardware and software and the difference between them.
2. The student should be familiar with the concept of an Operating System (OS).
  - a. The student should be aware that the OS is a type of software that provides an interface between the computer and the user.
  - b. The students should be aware of filing systems (folders/directories, saving/opening files etc.)

**Level 5:**

**The student is aware of the wide range of usage of computers.**

1. Students have a broad perspective regarding the use of computers and are aware that computers are being used in almost every field, and should be aware of the different types of applications that are available (graphics , scientific, audio etc.).
2. The Student has a general awareness of the development in computer technology from a historical perspective and is aware of the rate at which computer technology is developing.

**Level 6:**

**The student is aware of simple problems that may be encountered while using a computer and is equipped to conduct basic troubleshooting.**

1. The student is aware of:
  - a. The Windows folder and knows that altering the contents of this folder may cause problems.
  - b. The Program Files folder and knows that altering the contents of this folder may cause problems.
  - c. The concept of a virus and the protection that is provided by an anti-virus program.
  - d. Formatting and what it implies.
2. The student knows what to do if:
  - a. The computer/application freezes.
  - b. If the computer cannot be turned on.