ICT Basic Skills 1

Introduction to ICT

Prepared by Dr. Gilford T Hapanyengwi

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Université Virtuelle Africaine
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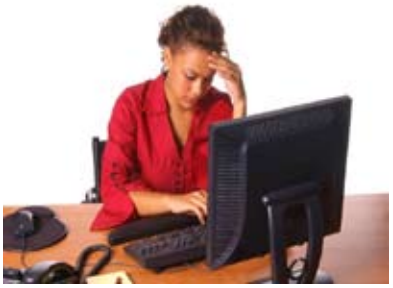

I. ICT Basic Skills 1: Introduction to ICT

By Dr. Gilford T Hapanyengwi, University of Zimbabwe

II. Prerequisite Courses or Knowledge

There are no prerequisites to this module. Basic notions of ICT will be introduce on this course.

III. Time

You are expected to spend 120 hours to complete this module. The hours are split in the following manner:

- Reading/Study hours: 30
- Research hours: 10
- Laboratory hours: 0
- Exercise hours: 80

IV. Material

The following materials are necessary for the successful completion of this module:

Hardware

- Access to personal computer
- CD Rom Drive
- Communication ports (e.g., serial, parallel, USB)
- Disk drive
- Printer

Software

- Windows (any version) (Operating System)
- Web browser (Internet Explorer, Mozilla, Netscape, etc.)

Other

- Access to an Internet Connection would be desirable

V. Module Rationale

You must have Basic ICT skills in order to teach or learn with ICT. You should recognize and appreciate the components that make up a computer. This will give you the ability to effectively utilize the computer and all its peripherals. The environment in which the computer exists namely operating system and network are paramount to its effective use. You will be better prepared to understand software packages used on a computer, like word processors, spreadsheets, and databases.

VI. Content

6.1 Overview

You will be introduced to computer input and output devices. You will then practice data entry into the computer through the use of the keyboard and the mouse. An introduction of the computer and its associated basic peripherals will be given. The significance of each component and peripheral device will be outlined. You will be exposed to concepts of the operating system thus you will appreciate the driving force of the computer. Lastly you will be exposed to how the computer communicates through networking and also to the basic use of the Internet.

6.2 Outline

Unit Number	Unit	Learning Hours
1	Introduction to Keyboarding and Computing Environment	30
2	Using Computer Input and Output Devices	30
3	Computer and Operating Systems	30
4	Computer Networks and the Internet	30

6.3 Graphic Organizer

A graphic organizer is an instructional tool used to illustrate to a learner prior knowledge about a topic or section of text or set of concepts. The organiser given below shows you the sequence in which the material for this module should be covered and the general relationships among the sections.

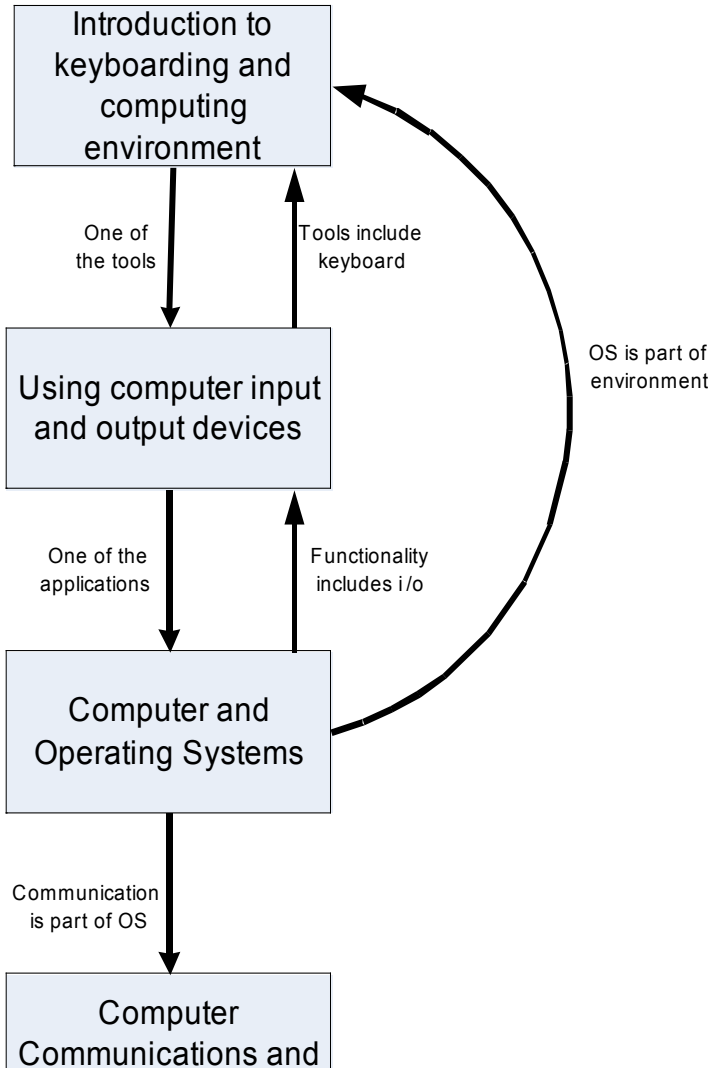

Figure 1. « Flow » of the training module

VII. General Objective(s)

The main objectives of the module are to have you:

- Acquire input skills (keyboarding and use of mouse)
- Acquaint with the computer interfaces
- Acquaint with ICT terminology
- Acquaint with input and output devices
- Appreciate how the computer is related to its networked environment
- Perform basic navigation of a windows based operating system

VIII. Specific Learning Objectives (Instructional Objectives)

Unit	Learning Objective
Unit 1: Introduction to keyboarding and computing environment	By the end of this unit student will be able to: • Attain basic keyboarding skills. • Accurately identify and describe the characteristics and functions of a variety of currently used input and output devices • Correctly use general computer and ICT terminologies within the context
Unit 2: Using Computer Input and output devices	By the end of this unit student will be able to: • Effectively identify and connect the different computer peripherals to the computer • Effectively use the local input output devices, such as keyboards, mouse, printers, CD ROM writers
Unit 3: Computer and Operating Systems	By the end of this unit student will be able to: • Define an operating system • Give examples of operating systems • Know what a file and directory are
Unit 4: Computer Networks and the Internet	By the end of this unit student will be able to: • Identify a basic computer network • Identify the basic components of the Internet • Describe the basic functions of the Internet • Name different browsers

IX. Teaching And Learning Activities

Pre-assessment

Title of Pre-assessment: Introduction to ICT

Rationale: To measure your level of appreciation of the computer and its related environment.

Questions

1. Which of the following devices are used for input:

   A) Mouse
   B) Printer
   C) Joystick
   D) Scanner
   E) Keyboard
   F) Screen

2. Which of the following devices are used for output:

   A) Mouse
   B) Printer
   C) Joystick
   D) Scanner
   E) Keyboard
   F) Screen

3. A computer keyboard is different from the keyboard of a type-writer

   A) True
   B) False

4. What is the purpose of an operating system

   A) To manage the resources of a computer
   B) To guarantee the authenticity of a computer
   C) To give a computer an identity
   D) To enable registration of a computer on the Internet

5. Of the following identify the one(s) that are operating systems

   A) LINUX
   B) Word
   C) Excel
   D) Windows

6. Arrange the following types of computers with respect to physical size starting with the largest: laptop, server, desktop.

   A) Laptop, server, desktop
   B) Server, desktop, laptop
   C) Desktop, server, laptop
   D) Server, laptop, desktop
   E) Desktop, laptop, server

7. Which of the following are types of printers:

   A) Dot-matrix
   B) Laser
   C) Bubble-jet
   D) All of the above

8. What is the use of electronic mail (email)

   A) To communicate with another user
   B) To announce your presence on the network
   C) To generate files

9. Which one of the following statements are true

   A) A directory is made up of files which are made up of characters
   B) A file is made up of directories which are made up of characters
   C) Files make up directories, and Files also make up characters
   D) Directories are found in both files and characters

10. In the context of the World Wide Web, what does ISP mean:

   A) Information Service Provider
   B) Internet Service Provider
   C) Information Secured Package
   D) Independent Secure Provision

11. Which of the following are services on the Internet

A) Email
B) Chat
C) News groups
D) All of the above
E) None of the above

12. A computer virus is responsible for

A) Distribution of files in a directory
B) Distribution of directories to a file
C) Potentially causing great harm to files or other programs in a computer

13. Identify the following images

A) Memory stick
B) Keyboard
C) Power Cable
D) Diskette
E) Mouse
F) Network cable
G) Hub/Switch

Title of Pre-assessment : Introduction to ICT

ANSWER KEY

1. Which of the following devices are used for input:

   A) Mouse
   B) Printer
   C) J oystick
   D) Scanner
   E) Keyboard
   F) Screen

2. Which of the following devices are used for output:

   A) Mouse
   B) Printer
   C) Joystick
   D) Scanner
   E) Keyboard
   F) Screen

3. A computer keyboard is different from the keyboard of a type-writer

   A) True
   B) False

4. What is the purpose of an operating system

   A) To manage the resources of a computer
   B) To guarantee the authenticity of a computer
   C) To give a computer an identity
   D) To enable registration of a computer on the Internet

5. Of the following identify operating systems

   A) LINUX
   B) Word
   C) Excel
   D) Windows

6. Arrange the following types of computers with respect to physical size starting with the largest: laptop, server, desktop.

A) Laptop, server, desktop
B) Server, desktop, laptop
C) Desktop, server, laptop
D) Server, laptop, desktop
E) Desktop, laptop, server

7. Which of the following are types of printers:

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A) Memory stick

B) Keyboard

C) Power Cable

D) Diskette

E) Mouse

F) Network cable

G) Hub/Switch

Title of Pre-assessment: Introduction to ICT

The Pre-assessment is meant to give you a feel of what this module is going to cover. The questions are split into four different sections to correspond to the units in the module. The score from the pre-assessment is a guide as to your level of the grasp of the concepts. Please do not be discouraged by the resulting score.

Of importance is visual identification of the components of the computer. You should be able to associate the functions of each component with the corresponding pictures. Next there is the classification of the various components and peripherals. Note that the quality of the outcome of a given task is dependent on the proper selection of a peripheral.

You will also realize a high interdependence of the various devices and thus the various units. Some of the concepts will become clearer with continued use, which will be found in the next units.

X. Key Concepts (Glossary)

KEYBOARD: This is an input device for the computer. It comes in three main types the QWERTY, the AZERTY, and the DVORAK. The difference between the three types is in the layout of the keys. We are using the QWERTY keyboard. To identify the QWERTY keyboard look at your keyboard and observe that the third row of keys has the following keys: “tab”, “Q”, “W”, “E”, “R”, “T”, “Y”, as the first seven keys.

Computer Screen (Computer Monitor): This is a communication device that is used for displaying information from the computer. Its main use is as an output device although it is at times used as an input device.

World Wide Web: Another name used for Internet network

Input device: Any of a number of devices that are used to enter information into a computer (e.g.: keyboard, mouse, scanner, etc.)

Output device: Any of a number of devices that are used to get information from a computer (e.g.: screen, printer, etc.).

Peripheral device: This is a device that is attached to the main body of the computer for use by the computer (mainly input and output devices).

Operating system: Abbreviated OS, the Operating System is the piece of software which organizes and controls the computer., E.g., Windows 98, Linux, UNIX (source: Basic Computing Using Windows)

Drives: Devices that are used to access and to store data

Computer Network: Two or more computers connected together to share files and resources.

Directory: A Directory is the path given to a folder on a drive. For example a text file called Phone Numbers is located in the My Documents directory on the C:\ drive. It would therefore read “C:\My Documents\PhoneNumbers.txt”

XI. Compulsory Readings

Reading #1

Complete reference: African_SchoolNet_Toolkit_-_I_01.pdf

Abstract: This is a comprehensive reference that covers a lot of the basic computing terms. It covers in its various sections material that is relevant to each of the units specified below. It is important to match the relevant chapters to the relevant units so that the reading is synchronized.

Rationale: Virtually all of the terms that are covered in this module, and in the other modules for that matter, are defined in this reference. It is a well written reference that will give you the appropriate guidance.

Reading #2

Complete reference: Basic Computing using Windows (March 2006) From Wikibooks (1st ed.) **http://en.wikibooks.org/wiki/Basic_Computing_Using_Windows**

Abstract: Microsoft Windows is one of the most (if not the most) widely used operating system on computers. This reference gives you a very comprehensive overview of the use of Microsoft Windows. As a precursor to this coverage it also gives a wide coverage of the basic components of a computer.

Rationale: Though you are going to cover the operating system in depth in the second module this reference will give you a good test to the things to come. It will also give a good perspective of how Windows as evolved.

Reading #3

Complete reference: Basic Computing using Windows/Networks and the Internet

http://en.wikibooks.org/wiki/Basic_Computing_Using_Windows/Networks_and_the_Internet

Abstract: Networking of computers has lead to the possibility of sharing of resources. Through the advent of the Internet the sharing information has even become more apparent as more ways of sharing information have been developed. Through the Internet information can now be shared in different forms.

Rationale: This reference gives the sufficient and necessary reference to the Internet and networking. Of course this reference is only going to be relevant, at least for the Internet part, to those persons that have connectivity.

Reading #4

OpenOffice.org User Guide

http://documentation.openoffice.org/manuals/OOo2.x/user_guide2_draft.pdf

Reading #5

Getting Started Guide

http://documentation.openoffice.org/manuals/oooauthors2/0100GS-GettingStarted.pdf

Reading #6

Migration Guide

http://documentation.openoffice.org/manuals/oooauthors2/0600MG-Migration-Guide.pdf

XII. Compulsory Resources

Resource #1

Complete Reference: Typing Tutor

URL: http:www.typefaster.sourceforge.net (the download file)

Abstract: TypeFaster is a typing tutor. It is meant for both novices and professionals. So no matter the level at which you are TypeFaster will still be a very good resource. Its major strength is the keeping of traceable and easy to use statistics. It allows for a self paced use by anyone who is willing to start or perfect their touch typing.

Rationale: It has been found that if one perfects their touch typing then they boost their confidence in learning of computers.

Resource #2

Complete reference: Self made screen capture on typing tutor.

Abstract : A self made set of slides was made giving the instructions on how to access the typing tutor.

Rationale: This will help especially since the users will not be very much aware of the layout of the desktop this moment. The challenge though is that since users do not have the same version of windows only a number of versions can be supplied at a time.

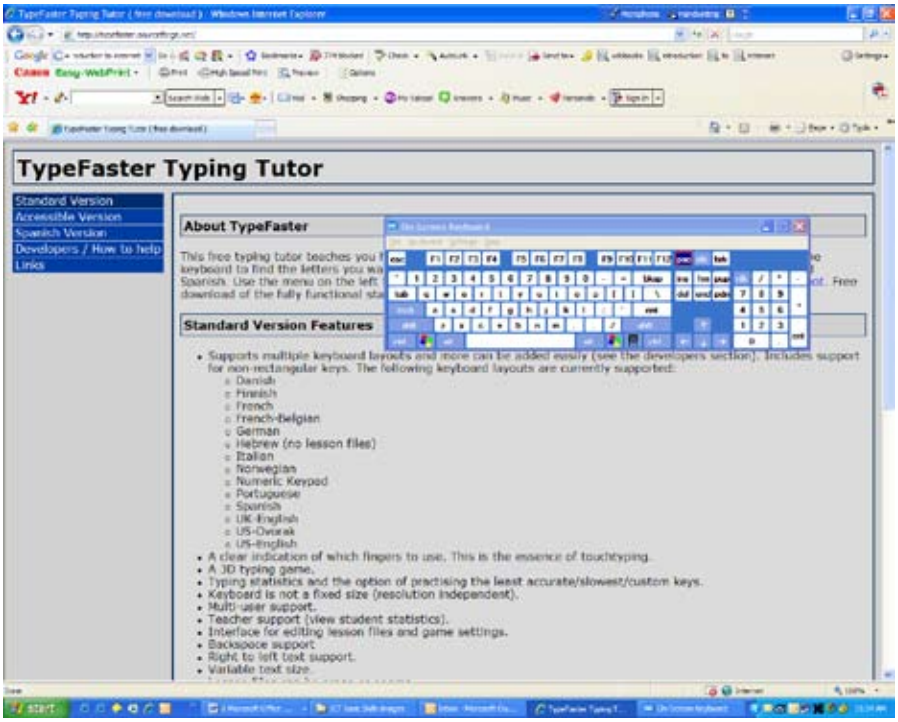
XIII. Useful Links

Useful Link #1

Title: Typing Tutor

URL: http://typefaster.sourceforge.net/ (December 2006)

Screen capture:



Description: TypeFaster is a typing tutor. It is meant for both novices and professionals. So no matter the level at which you are TypeFaster will still be a very good resource. Its major strength is the keeping of traceable and easy to use statistics. It allows for a self paced use by anyone who is willing to start or perfect their touch typing. It has been found that

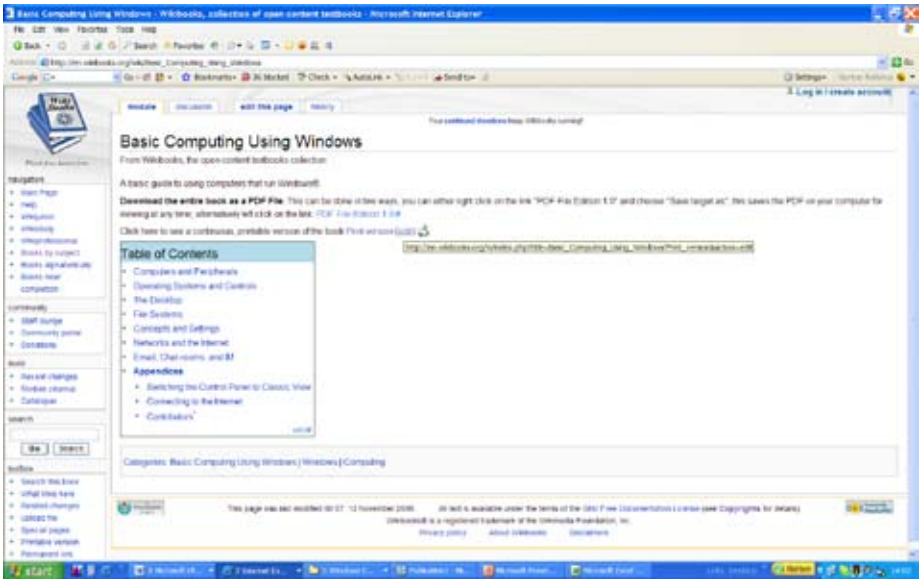
Rationale: This website allows students to download and install the program,

Useful Link #2

Title: Computing using Windows (March 2006) From Wikibooks (1st ed.)

URL: http://en.wikibooks.org/wiki/Basic_Computing_Using_Windows

Screen capture:



Description: A good coverage of the basic principles of Windows operating system. It gives useful information on how to operate a computer that has windows operating system installed on it.

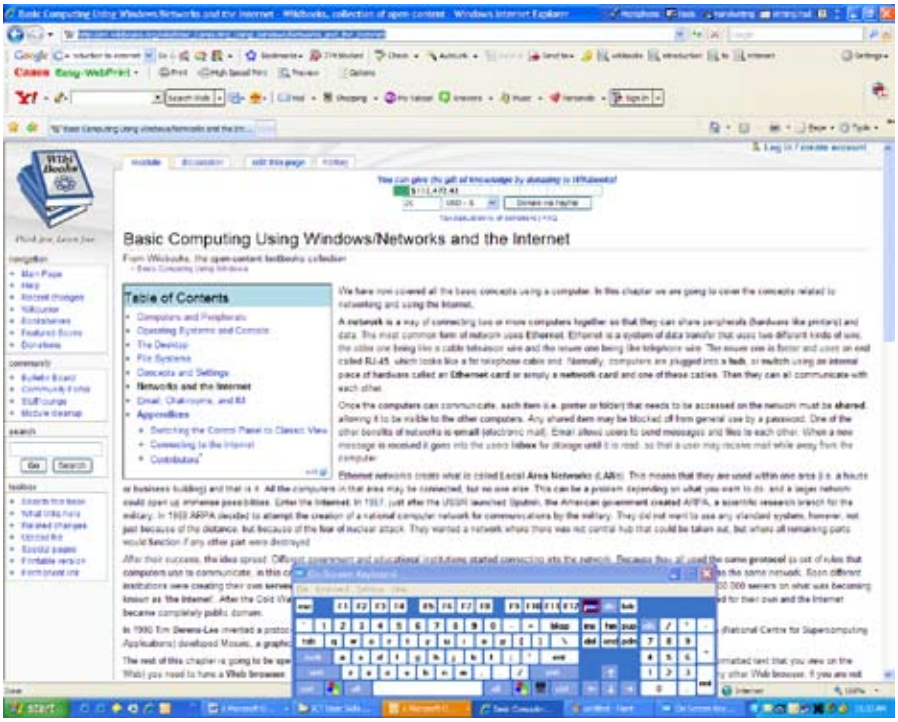
Rationale: Virtually all of the concepts that are covered in this module and in the other modules are covered in this reference.

Useful Link #3

Title : Complete reference: Basic Computing using Windows/Networks and the Internet

http://en.wikibooks.org/wiki/Basic_Computing_Using_Windows/Networks_and_the_Internet

Screen capture :



Description: Networking of computers has lead to the possibility of sharing of resources. Through the advent of the Internet the sharing information has even become more apparent as more ways of sharing information have been developed. Through the Internet information can now be shared in different forms.

Rationale: This reference gives the sufficient and necessary reference to the Internet and networking. Of course this reference is only going to be relevant, at least for the Internet part, to those persons that have connectivity.

XIV. Learning Activities

Learning activity # 1

Title of Learning Activity: Use of the computer keyboard

Specific teaching and learning objectives

Attain basic keyboarding skills to ensure good ability to work the computer.

Summary of the learning activity

In this activity you will acquire skills to properly use a computer keyboard. The use of the computer keyboard is paramount to the proper use of the computer. It is the main input device. Proper keyboarding skills are easy to acquire if one follows a typing course. Typing tutors are meant to be good replacements for typing courses. We in this case are using the TypeFaster typing tutor.

Key concepts

- KEYBOARD: This is an input device for the computer. It comes in three main types the QWERTY, the AZERTY, and the DVORAK. The difference between the three types is in the layout of the keys. We are using the QWERTY keyboard. To identify the QWERTY keyboard look at your keyboard and observe that the third row of keys has the following keys: “tab”, “Q”, “W”, “E”, “R”, “T”, “Y”, as the first seven keys.
- TYPING: This is the process of entering information into the computer by means of a computer keyboard.
- TYPING TUTOR: Is a programme that assists with mastering the skill of using the keyboard.

List of relevant readings

The help facility in the TypeFaster typing tutor.

List of relevant resources

- A typing tutor in this case we are using TypeFaster.
- A computer with a “QWERTY” keyboard

List of relevant useful links

Source: TypeFaster

URL: http://typefaster.sourceforge.net

Date: Consulted on 26th August 2007

Detailed description of the activity:

We are going to use the TypeFaster typing tutor. You need to acquaint yourself first with the system.

Prerequisite (before the activity): installing TypeFaster software

1. from the site http://typefaster.sourceforge.net download the application installer file
2. once downloaded, doubleclick the installer file icon and follow the steps

Invoking the TypeFaster typing tutor:

1. Switch on your computer.
2. Move your mouse pointer to the start button that is at the bottom left corner of your screen.
3. Go to All Programs
4. Look for TypeFaster
5. Click on TypeFaster.

The above procedure will leave you with the following screen displayed.

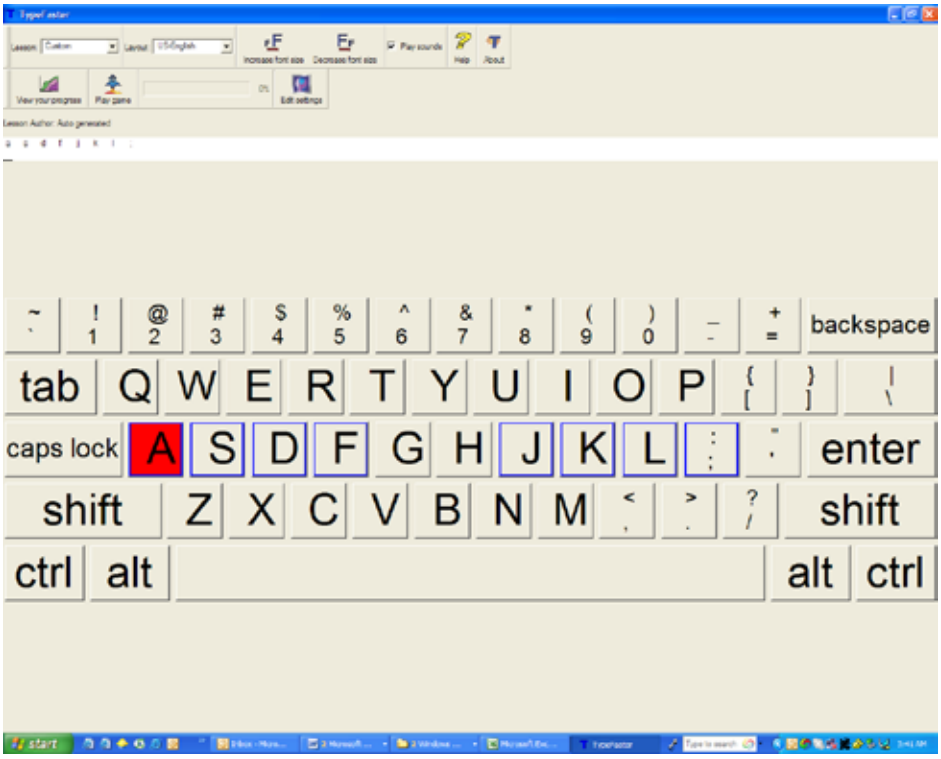


Figure 2: TypeFaster Initial Screen

Acquainting you with TypeFaster typing tutor:

1. To understand how to use TypeFaster please go to the Help button and click on it.
2. Read through the whole Help.

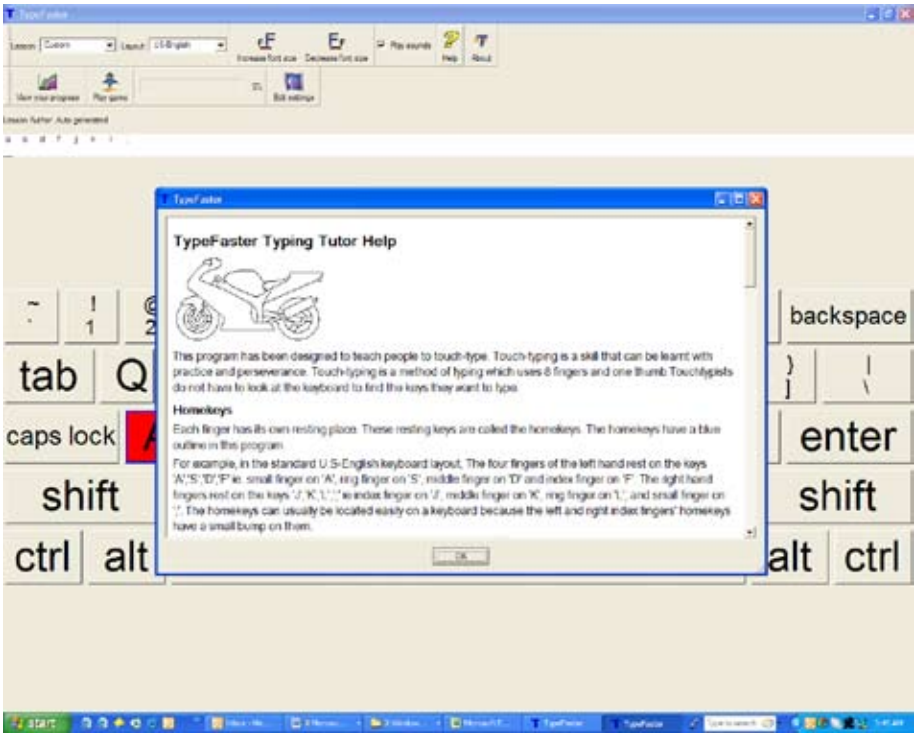


Figure 3: The Help facility in TypeFaster

Invoking a lesson:

1. On the top left hand side of the screen select the relevant lesson
2. In the next tab (Layout) select US-English.

Your task is to go through lesson number 1 up to lesson number 15. After each lesson please check the statistics of what you have done. We want to achieve an acceptable level of proficiency of at least 90% accuracy and at least 30 words per minute.

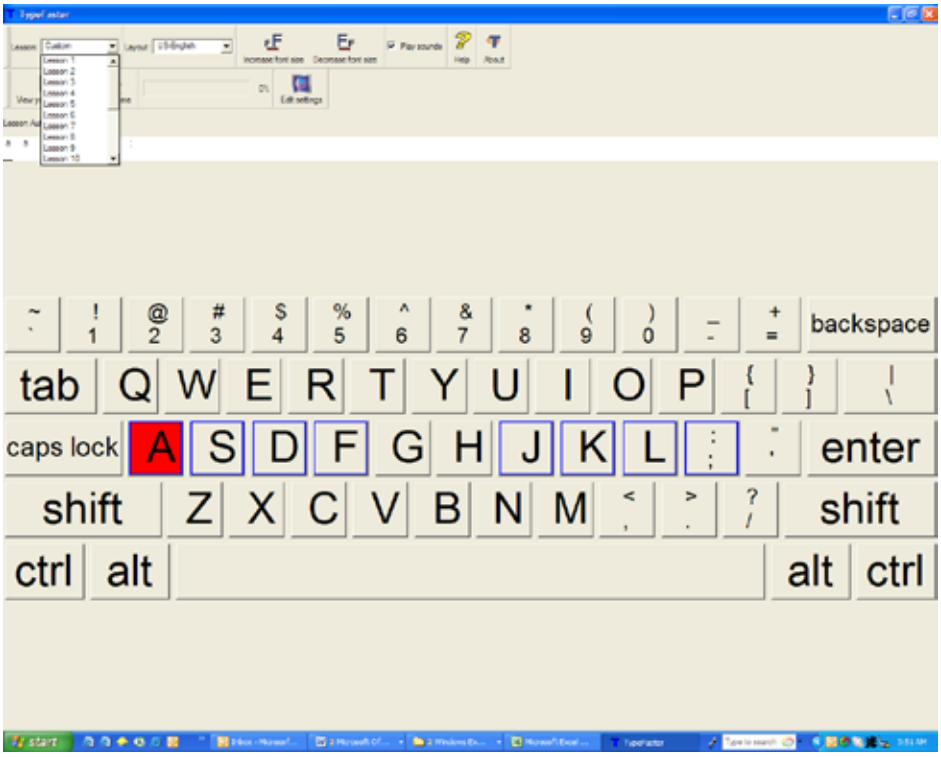


Figure 4: Lessons on offer in TypeFaster

Formative evaluation:

Repeat each lesson until you have reached at least 95% accuracy and at least 30 words per minute. Print the graph of your performance by doing a screen capture and submit it to your instructor. If your instructor has email please do submit it in that way.

How to make Screen Capture:

1) Press the Print Screen key on your keyboard. It may be labeled [PrtScn].
2) Open a Word Document (or any type of document)
3) Go to the Edit menu and choose Paste.

Optional formative evaluation:

It is desirable to have a computer when teaching keyboarding skills. However, access to computers though desirable is not always possible. Compare and contrast, in not more than 1000 words, how you would teach keyboarding skills using a computer or using a typewriter.

Learning activity # 2

Title of Learning Activity: Identification of components of a digital computer

Specific Teaching and Learning Objective(s)

- Accurately identify and describe the characteristics and functions of a variety of currently used input and output devicesss
- Accurately identify and describe the characteristics and functions of a number of storage devices
- Correctly use general computer and ICT terminologies within the context
- Effectively identify and connect the different computer peripherals to the computer

Summary of the learning activity

In this activity you will identify different components of a computer system. These parts of the computer system are what make up a digital computer.

Key concepts

Computer: A computer is a machine that inputs data, processes the data, and outputs it.

Input device: Any of a number of devices that are used to enter information into a computer (e.g.: keyboard, mouse, scanner, etc.)

Output device: Any of a number of devices that are used to get information from a computer (e.g.: screen, printer, etc.).

Peripheral device: This is a device that is attached to the main body of the computer for use by the computer (mainly input and output devices).

List of relevant readings

Source: Microsoft Office
WWW: bcschools.net/staff/MicrosoftOffice.htm
Date consulted: 29 August 2006

Source: Basic Computing using windows
WWW: http://en.wikibooks.org/wiki/Basic_Computing_Using_Windows
Date consulted: 29 August 2006

List of relevant resources:

The pictures on the CD that was distributed for building the course on ICT basic skills.

List of relevant useful links:
Source: Microsoft Office
WWW: bcschools.net/staff/MicrosoftOffice.htm
Date consulted: 29 August 2006

Source: Basic Computing using windows
WWW: http://en.wikibooks.org/wiki/Basic_Computing_Using_Windows
Date consulted: 29 August 2006

Detailed description of the activity:

A computer comprises of a number of identifiable components. The components can be split into three broad categories namely storage devices, input devices, and output devices. It is imperative to be able to identify these devices as it gives you a good understanding of how a computer operates. In this unit we are going to list a set of different hardware components of a computer. You will then be expected to visually identify the various components. This identification will be from a provided list of diagrams or illustrations. For each component you will give a set of properties and thus be able to make meaning of its use.

Input devices are used to facilitate the entering of data into the computer. As you should appreciate the computer is used by a wide range of users. Different users can also use it in different environments. As a result there is a reason to have a wide rage of input devices.

Activity

Complete for following table as comprehensively as is possible.

Device name	Picture/ Illustration	Capacity or specifications	Where is it used	Who uses it
Mouse				
Qwerty keyboard				
Azerty keyboard				
Wireless mouse				
Light pen				
Joystick				
Microphone				
Touch Screen				

Output devices are used to facilitate the extraction of data from the computer. Analogous to input devices there are a range of output devices that are suitable for different scenarios.

Activity

Complete the following table as comprehensively as is possible.

Device name	Picture/ Illustration	Capacity or specifications	Where is it used	Who uses it
CRT Screen				
Plasma Screen				
Speakers				
Laser printer				
Dot matrix printer				
Colour printer				

Storage devices, also known as memory devices, are used to keep the data. The data is kept either for short term (also known as volatile memory) or for long term (also known as non-volatile memory).

Activity

Complete the following table as comprehensively as is possible.

Device name	Picture/illustration	Capacity Range	Who uses it
Memory stick			
Hard disk			
Compact disk			
DVD			
Diskettes			

Formative evaluation

Storage devices have seen a phenomenal growth over the last few decades. Among other things the amount of data that the devices store has increased tremendously. Additionally, the size and technologies used in storing the data has also seen a significant change. You are required to trace the storage capacity of the hard disk since its inception. What has this change in space meant with respect to the use of the computer by a teacher for both teaching and administrative purposes?

Learning activity # 3

Title of Learning Activity:

Building of Computer Systems for different functions in a school

Specific Teaching and Learning Objective(s)

- Accurately identify and describe the characteristics and functions of a variety of currently used input and output devices.
- Identify communication tools
- Accurately identify operating system software that can be used on a given computer
- Correctly use general computer and ICT terminologies within the context
- Effectively identify and connect the different computer peripherals to the computer

Summary of the learning activity

In this activity you will identify different components of a computer system. You will also differentiate between the various configurations of the computer system.

Key concepts

Computer: A computer is a machine that inputs data, processes the data, and outputs it.

Input device: Any of a number of devices that are used to enter information into a computer (e.g.: keyboard, mouse, scanner, etc.)

Output device: Any of a number of devices that are used to get information from a computer (e.g.: screen, printer, etc.).

Peripheral device: This is a device that is attached to the main body of the computer for use by the computer (mainly input and output devices).

Computer System: A computer system comprises of a computer, the software, and peripheral devices that are required to perform a specific task.

List of relevant readings

Source: Microsoft Office
WWW: www.bcschools.net/staff/MicrosoftOffice.htm
Date consulted: 29 August 2006

Source: Basic Computing using windows
WWW: http://en.wikibooks.org/wiki/Basic_Computing_Using_Windows
Date consulted: 29 August 2006

List of relevant resources:

None

List of relevant useful links:

WWW: http://en.wikibooks.org/wiki/Basic_Computing_Using_Windows

Date consulted: 29 August 2006

Detailed description of the activity:

You are employed at a rural school that has just been connected to the national electricity grid. Prof. Moyo the Governor of the Central Bank who happens to be a former head girl of the school has decided to donate ten computers to the school. Her donation includes peripheral devices to be used by the school. As the head Science teacher at the school you have been asked by the headmaster to assist in the acquisition of the computers and their related peripherals.

A number of areas requiring computers have been identified:

- A computer to be used by the headmaster
- A computer to be used by the school bursar
- The rest of the computers will be used by students and teachers in a laboratory.

To assist you with the task at hand you have gone ahead and asked the headmaster and the bursar to give you a summary of their daily duties. You have also seized this opportunity to set the lab in such a way that students can use it for learning.

The headmaster is the administrative head of the school. He is accountable to both the Government, who are the owners of the school, and the Parents Association, the major benefactors of the school. He is the main link of the school to the public. All visitors, parents, and prospective benefactors pass through his office. It is thus imperative to give a good image through the furnishings in his office.

The headmaster corresponds with a number of important persons, including the ministry of education. These offices, where possible, expect well printed and good looking correspondence. It is the tradition of your school for all pupil records to be kept by the headmaster as there is no school registrar to do this function. There is an upcoming convention of headmasters. Your headmaster is expected to bring his presentation on an external storage device for onward use at the convention.

The Bursar writes you the following points specifying his daily duties:

1. Recording of all monies paid for fees
2. Recording of all fees to be paid by the students
3. Recording of all levies to be paid by the students
4. Payment of allowances to teachers and other workers
5. Issuing of receipts of payment to the students

Formative evaluation

Based on what you learned in Exercise 2, determine which peripheral (input and output) devices are appropriate for each situation.

1. Give a specification of the computer system you would recommend for your school headmaster. Give a reason for each choice you make for the configuration of the system.
2. Give a specification of the computer system you would recommend for the bursar. Clearly state where it differs with the one for the headmaster.
3. Give a specification of the computer system you would recommend for the student and teachers laboratory.

Learning activity # 4

Title of Learning Activity:

Getting acquainted with your computer

Specific Teaching and Learning Objective(s):

- Define an operating system
- Give examples of operating systems
- Navigate an operating system
- Navigate files and file systems

Summary of the learning activity

In this activity, you will navigate a basic windows environment. A windows environment is common independent of the software that is in use. An ability to click, drag, drop, copy, and, paste is fundamental in the understanding of the use of computer environments.

You will also learn how to create a file and how to save a file.

Key concepts

Operating system: Abbreviated OS, the Operating System is the piece of software which organizes and controls the computer., E.g., Windows 98, Linux, UNIX (source: Basic Computing Using Windows)

Drives: Devices that are used to access and to store data.

Files: A place where information is stored.

Booting (Starting) a computer: Action of turning on a computer so that it can be used.

Mouse: A device that is used for input into a computer.

Drives: are devices used to store data. Most computers have at least two drives: a hard drive C:\ which is the main means of storage) and a floppy drive (which stores smaller volumes of data (1.44 Mb) on 3.5” disks - floppy disks). The hard drive is typically designated the C:\ drive and the floppy drive is typically designated the A:\ drive. If you have a CD drive, it is typically designated the D:\ drive. You can also have an E:\ drive that is designated for a USB port through which a memory stick can be connected.

Folders: are used to organize the data stored on your drives. Think of your drives as filing cabinets. You want to sort your filing cabinets with folders that store different files. The files that make up a program are stored together in their own set of folders. You will want to organize the files you create in folders. You will probably want to store files of a like kind in a single folder.

Directory: A Directory is the path given to a folder on a drive. For example a text file called Phone Numbers is located in the My Documents directory on the C:\ drive. It would therefore read "C:\My Documents\PhoneNumbers.txt"

File Extensions: are the ending letters associated with a file and an application that it can be manipulated in. This way Windows knows to tell which program to open the file you want to manipulate. For example a text file has an extension of .txt, so a text file created in Notepad called Phone Numbers would look like this PhoneNumbers.txt ... You do not have to assign a file extension to a file that you create. The program you use will automatically do this for you. All you need to do is give it a filename. Some other common extensions are as follows:

- .doc = Microsoft Word Document
- .xls = Microsoft Excel Document
- .ppt = Microsoft PowerPoint Presentation
- .mdb = Microsoft Access Database
- .bmp = Windows Bitmap Picture
- .wav = Sound File
- .html or .htm = Internet Document

Icon: An Icon is a graphic image. Icons help you execute commands quickly. Commands tell the computer what you want the computer to do. To execute a command by using an icon, double-click on the icon.

List of relevant useful links:

http://www.mum.edu/helpdesk/beginners/files.html

http://www.mum.edu/helpdesk/beginners/winexp.html

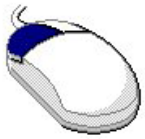
Detailed description of the activity:

Nowadays virtually every piece of equipment comes with a set of operational manuals. The purpose of these manuals is to give the user an ability to effectively use the equipment. The same is true for a computer. Resident on each computer is a program called an operating system. This program is responsible for managing the resources on the computer. For one to be able to use the computer effectively they have to know how to navigate the computer. The purpose of this activity is to give you an ability to effectively navigate a windows based operating system. We are going to use the Microsoft Windows Operating System as our example.

Using Your Mouse

A mouse has one, two, or three buttons. A "typical" mouse has two buttons on it.

- There are two buttons on each mouse.
- The left mouse button is used to open programs and to select items



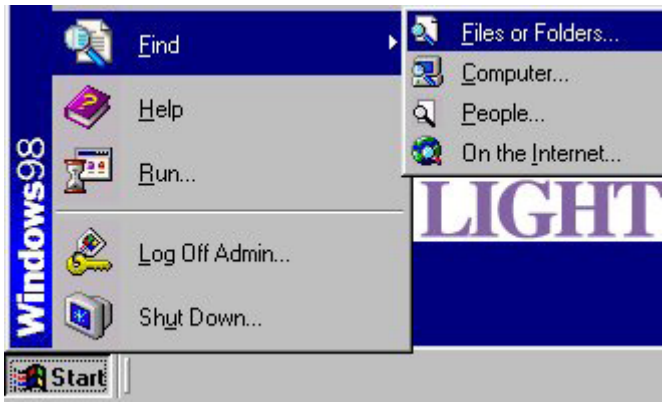
- The right mouse button is used to open a sub menu to get other options

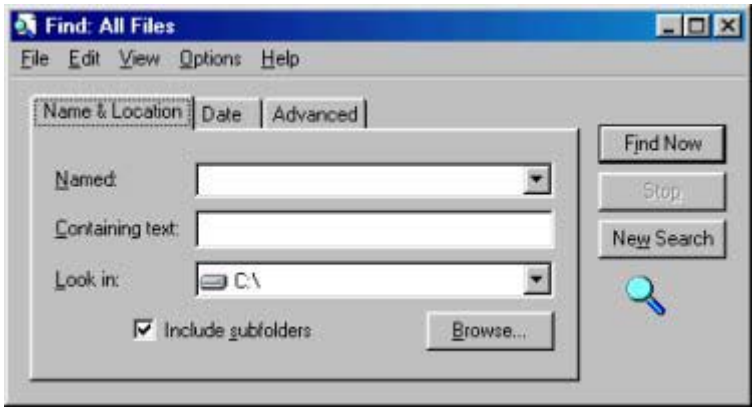
Accessing Your Files

- Your files will be stored on one of the drives. If they are stored on the C:/ drive then it is typically in the folder directory C:\mydocuments.

Finding Files on Your Computer

- If, for some reason, you cannot locate a file on your computer or home drive, you still might be able to locate it by using the Find Files Program.
  1. Click on the Start at bottom left corner of screen
  2. Click on Find
  3. Select the Find Files or Folders

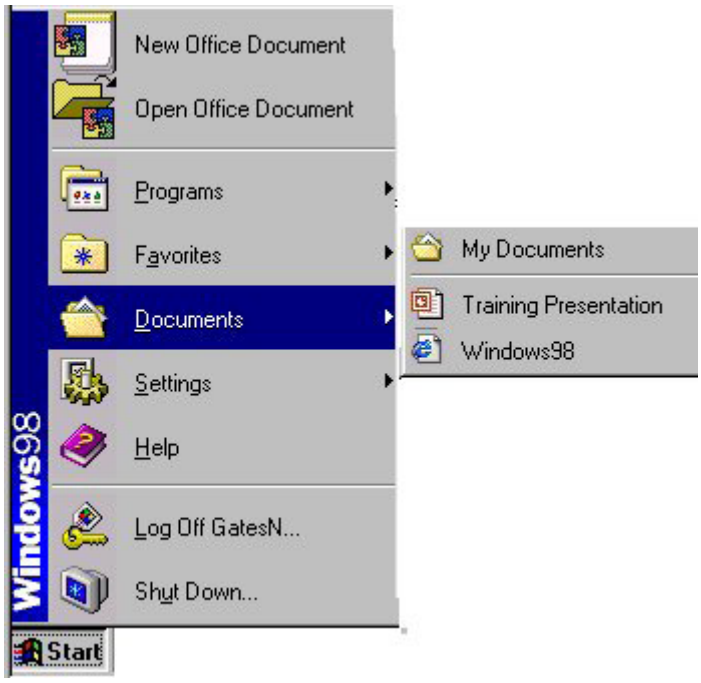




4. Enter your search criteria. You do not need to complete every field. Only enter the criteria you want to use for your search. Switch through the different tabs (Date, Advanced, Name & Location) to further your search
5. Click the Find Now button

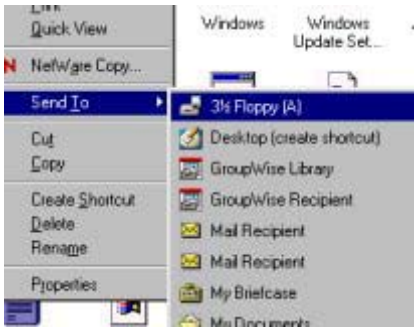
Locating Your Most Recent Files

- Windows provides shortcuts to your most recent files, so you may get access to them very quickly.
  1. Click on the Start at bottom left corner of screen
  2. Click on Documents
  3. Select the file that you want



Copying a file/folder to a floppy disk

1. Select the Folder you want to move or copy
2. Right click on the file or folder in the right pane
3. Select Send To -->
4. Select 3.5 Floppy (A)



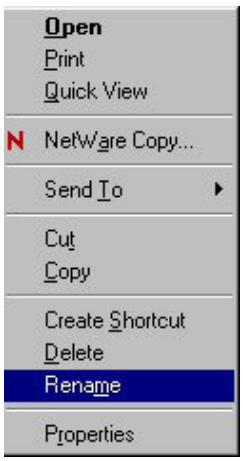
5. You can also drag the file to 3.5" Floppy (A:\) in the left pane

Copying a file/folder from a floppy disk to other drive

1. Select 3.5 Floppy (A:) in the left pane
2. Select the File/Folder you want to copy from in the floppy drive
3. Drag it to your destination

Renaming A File or Folder

4. Select the File or Folder you want to rename
5. Right Click on it
6. Select Rename
7. Rename File



Teaching tip

It is important for the students to have lots of practice, especially at this early stage of exposure to computers. You should therefore prepare a lot of time for the students to access the computers. Do not worry too if the students tend to hazard on the procedure at this stage.

Formative evaluation (1)

1. Location of files:

   A) Find all files that have an extension .doc
   B) Find all spreadsheet files that have the word "university" in them

2. Copying and saving files:

   A) Select one file that is on your hard drive
   B) Copy that file, with the same name to another drive, A:/ say
   C) Rename the file that you have just copied
   D) If you have another drive, E:/ say, please do copy the renamed file to it

Formative evaluation (2)

1. A big challenge with teaching introduction to windows operating system is that the computers in a laboratory could have different versions of the operating system. Discuss the issues to consider when you are faced with a situation where you have such a situation. Remember that your aim is to maximize the delivery of knowledge to the students. Please do limit your response to 1000 words.

XV. Synthesis of the Module

By now you should have solid working knowledge of the basics of the use of computers. More specifically you should be familiar with the following:

- The ability to touch type using a computer keyboard should be apparent. This will enable to significantly improve the volume and quality of work you can produce from the computer.
- Ability to distinguish computer peripherals and know what they are used for. You should be able to match a peripheral with the correct user and environment where it can be used.
- Performance of basic navigation of a windows operating system. This basic ability to navigate should enable you to access, store, and retrieve information from the computer.

All of the above skills should be known in both a student context and a teacher context. There are a number of challenges associated with the computing environment being used by a given user. Since the environments can even vary within a given laboratory the versatile knowledge is even more important.

XVI. Summative Evaluation

1. What is a typing tutor? Give two advantages of using a typing tutor when you learn how to type. Give one reason why you would not use a typing tutor in learning how to type.
2. For each of the following classify whether it is an input device or an output device or both:

   A) Mouse
   B) Printer
   C) Joystick
   D) Scanner
   E) Keyboard
   F) Screen
3. For each of the above specify the three characteristics of classifying the device.
4. What is an Operating System? Give at least three examples of operating systems
5. We have seen three principal types of computers : laptops, desktops, and servers. For the following situations, identify which type of computer would be most appropriate?

   A) A young student wants to buy a computer. She lives far from the university, and often work both at home and on-campus. Additionally, the student lives with two roomates in an appartment with very limited space.
   B) An assistant in an office needs a new computer. He works all day long at a desk; his responsabilites are principally word processing and spreadsheets.
6. Name three services available on the Internet to help people communicating with each others.

   Associate each need with the appropriate hardware, and justify your choice (which could include one of the following 4 devices - Memory stick, Scanner, Hub/Switch, Touch Screen):

   A) A teacher has just installed a second computer in his classroom, and now wants to "network" the two machines, in order to exchange and share files.
   B) A young student wants to be able to easily carry the work she has done at school backl to her computer at home each evening.
   C) A store clerk wants to simplify the way they input transactions int their

computer – the current mouse and keyboard configuration is too slow.

D) A teacher wants a way for her students to take images from books and use them in their written report assignments on the computer.

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XVIII. Main Author of the Module

Module Developer Writing Tip. Module Developers should provide a brief biography (50-75 words), a picture, title and contact information (email).

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