

Advantages of Teleworking

- Reduced utility costs and employee's transportation reimbursement
- Reduced time for traveling to and from work
- Adapting working conditions to personal habits flexibility
- Possibility of working in the convenience of a person's home (or other places that are not an office)
- Lower stress level, provided there is a good organization and coordination, i.e. the flow of information between employees is unconstrained
- An excellent solution for people with disabilities or long term illness, parents, or those who enjoy traveling

Clipboard

Clipboard is a temporary storage area in a computer's memory. It may be used, for example, to store text that you are in the process of copying and pasting from one section of a word processed document to another section in the same document or to another document.

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Database

Database is a structured collection of data that can be used for a variety of purposes. Databases are usually stored on a Hard Disc inside your computer, on a CD-ROM, or at a website. A database may contain data relating to staff employed by a company or to students at an educational institution. Databases can also contain bibliographies, glossaries, vocab lists, etc. In order to set up and manage a database you need a database program such as Microsoft Access

Gamut

It is the limited range of colors provided by a specific input device, output device or pigment set.

Gang Scanning

It is sequential scanning of multiple originals using the same previously defined exposure setting for each.

Define Scripts

This is a type of program that consists of a set of instructions for another application or utility to use

Central Processing Unit

Central Processing Unit (CPU or processor) is a central part of a computer (and can be referred to as the computer's "brain"). It manages all other computer parts, monitors their mutual communication and performs arithmetic-logical operations. Processor speed is measured in hertz (or megahertz or gigahertz). Most famous manufacturers for personal computer processors are Intel and AMD

Define Resampling

It is an increase or reduction in the number of pixels in an image, required to change its resolution without altering its size. See also down-sampling and interpolation.

Handshaking

It is the process computers and modems go through in order to establish a connection and agree on the speed and protocols for data transmission.

Hayes Compatible

It is a modem is considered Hayes Compatible if it supports the Hayes command set (a language used to communicate with and control a modem).

Daughterboard

This is a board that attaches to (rides piggyback on) another board, such as the motherboard or an expansion card. For example, you can often add a daughter card containing additional memory to an accelerator card.

HTML

Hyper Text Markup Language (HTML) is a standard language used for developing web pages'. Hyper Text Markup Language is a markup language that web browsers use to interpret and compose text, images and other material into visual web pages.

Educational content for dissemination through ICTs

Although it is widely believed to be important, little research has been done about the need for gender and culturally inclusive electronic educational materials. Research into how such educational materials can be produced, resulting in best practice guidelines, would be quite useful.

Effective utilization of ICTs for professional development

The need for trained teachers is great throughout most LDCs, and ICTs are increasingly seen as important tools in reaching and engaging teachers on an on-going manner.

Computer Virus

Virus is a malicious program with the possibility of self-replication. In a computer it seeks other files, trying to infect them and the ultimate goal is to spread to other computers. Depending on what malicious code it contains, it may cause more or less damage to your computer.

Graphs

Graphs normally used to represent the nature of the relation of two dependent variables. Different types of graphs are

1. Line graph
2. Bar graph
- 3 Pie graph

Half toning Factor

It is a multiplication factor (between 1 and 2) applied to output screen ruling to calculate scanning resolution for optimum output quality. This is also known as the half toning factor.

Coprocessor

It is a chip designed specifically to handle a particular task, such as math calculations or displaying graphics on-screen. A coprocessor is faster at its specialized function than the main processor is, and it relieves the processor of some work. A coprocessor can reside on the motherboard or be part of an expansion card, as with an accelerator.

Defragmentation

Defragmentation is the process of locating the noncontiguous fragments of data into which a computer file may be divided as it is stored on a hard disk, and rearranging the fragments and restoring them into fewer fragments or into the whole file.

IP address

IP Address is short abbreviation for Internet Protocol Address. The unique numerical address of a computer on the Internet, expressed as four sets of numbers (maximum 3 digits each) separated by dots: e.g. 150.237.176.24 for one of the computers at the University of Hull - where the ICT4LT website is located. Computers on the Internet are nearly always referred to by more memorable domain names, which are mapped onto their IP address by special Internet computer known as name servers

Types of Network addresses

Network addresses are usually of two types:

(1) the physical or hardware address of a network interface card; for Ethernet this 48-bit address might be 0260.8C00.7666. The hardware address is used to forward packets within a physical network.

(2) The logical or IP Address is used to facilitate moving data between physical networks and is made up of a network number, a subnetwork number, and a host number. All Internet addresses at SDSU have a network number of 130.191, a subnet number in the range of 1-254, and a host number in the range of 1-254

Benefits of fieldtrips

- Connects Students to the Real World. School field trips provide every student with real-world experiences.
- Erases Classroom Boredom.
- Better Grades in Studies.
- Offers Different Cultural Experience and Creates a Social Bond.
- Meets Families Expectations.

Use of ICTs to teach illiterate youth

Issues of equity are central to the discussion of the education-related Millennium Development Goals. For a variety of reasons and in a variety of ways, the introduction of ICTs to benefit education can have profound impact on issues related to Education For

All. While for many ICTs offer a promise at greater inclusion of previously marginalized groups (whether marginalized by gender, disability, distance, language, culture, race, age or economic status), their use also brings with it very real dangers of increasing the marginalization of such groups inside the education system.

FTP

It is abbreviation of File Transfer Protocol. The Internet standard high-level protocol for transferring files from one computer to another across the network.

Clickable Image

This may be defined as any image that has instructions embedded in it so that clicking on it initiates some kind of action or result. On a web page, a clickable image is any image that has a URL embedded in it.

Define Webmaster

It may be defined as a person or group of people who maintain and administer a web server. Webmaster also refers to a standard Email address at most web hosts where comments and questions can be sent.

E-mail

It is called Electronic Mail. Private messages sent between users on different computers, either over a network or via a modem connection to an on-line service or BBS.

Filter

It is a piece of software that an application uses for file-format conversion or special effects. PageMaker, for example, has a filter that lets it import Microsoft Word files, while Photoshop has dozens of filters for special effects (such as image blurring). Filters can be part of the main application or external programs called plug-ins

Folder

It is an object that can hold other objects, such as other folders and files.

Interpolation

In the image manipulation context, this is the increase of image resolution by the addition of new pixels throughout the image, the colors of which are based on neighboring pixels.

Interrupt

It is a brief interruption of the computer's activity so that an urgent task can be performed.

IP Datagram

It is the basic unit of information passed across the Internet. An IP Datagram is to the Internet as a hardware packet is to a physical network. It contains a source and destination address along with data. Large messages are broken down into a sequence of IP Datagrams.

Successful and relevant strategies for using ICTs

The development of models and case studies on successful strategies for using ICTs to change pedagogical practices would be useful. Especially useful would be case studies and examples of so-called "multi-channel learning" practices, which focus on enriching the environment by engaging the resources that are available to help effect incremental change by coordinating the various ways to connect learners with information, knowledge, and stimulation, and to mediate those interactions. Such practices may be especially relevant in countries seeking to utilize ICTs to help meet education-related MDGs. The extent to which teacher training is currently being done with ICTs to meet these challenges is not well documented, especially at the in-service level. It is widely believed that interactive radio may be a cost-effective way of providing regular outreach and support to teachers, especially as it relates to

- (a) teacher subject knowledge and
- (b) teacher pedagogical practices.

In many countries, radio networks exist that serve non-education sectors (for example, in agriculture or community development), but that could be used to benefit education. In addition, where interactive radio is being used, many of them are part of pilot projects, and it is unclear to what extent such initiatives can be mainstreamed and sustained by the education system after the pilot project is completed.

Components of ICT in education

If the presence, magnitude and nature of ICT investments in education in developing countries is of interest to donors, standard definitions of ICTs in education must be

developed, agreed to, disseminated and utilized, and changes must be made to current coding practices of donor supported education projects. To this end, the formation of a multi-donor task force to study and this issue and agree upon certain common definitions and coding standards could be useful. Such standards and definitions need not (initially) be comprehensive, but should not focus exclusively on hardware indicators. A comprehensive study of a small number of donor-supported education projects to identify all uses of ICTs components could be a useful tool to support the effort to articulate and agree upon common definitions and standards.

Emerging Practices of using ICT in Education

Handheld devices have one great advantage over many other types of ICTs – they are mobile – and anecdotal evidence suggests that this mobility could provide help meet certain needs of schools and educational systems.

Internet

Internet is a huge collection of computer networks that can be communicated with each other. This word is coined from the words ‘interconnection’ and ‘network’. Through this, each computer user can communicate and share common resources with other users.

Bytes

It can be defined as, a measurement of computer memory or disc capacity. A byte comprises 8 bits.

Dialog box

It is a window that displays additional options or questions when a command is chosen

High Key

It is a light image that is intentionally lacking in shadow detail.

Baud

It is a unit of measurement that denotes the number of bits that can be transmitted per second. For example, if a modem is rated at 9600 baud it is capable of transmitting data at a rate of 9600 bits per second. The term was derived from the name of J.M.E. Baudot, a French pioneer in the field of printing telegraphy Baud It is a unit of measurement that

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Decompression

It is the expansion of compressed image files.

Advantages of E-Learning

Advantages of e-learning greatly coincide with learning from books, with a difference that the books come only in text and graphic form on paper, while e-learning materials have multimedia features, and the ability to remotely monitor lectures in real time. To illustrate, physicians can observe medical procedures that are currently taking place in another hospital; students can attend classes that are currently taking place at another university. Some of the advantages for students:

- Adaptive time, place and pace of learning
- Access and availability of education
- Unlimited repetition of lectures
- Reduced cost of education
- Multimedia environment (video, audio, text)

Functions of Teaching

Preservative Function of Teaching

- The main function of TEACHING is to preserve and protect the old values, customs, beliefs, traditions, etc.
- Teaching must help in preserving the vital elements of our heritage.

Transmitive Function of Teaching

- Teaching transfers knowledge, ideologies, theories, principles and attributes from one generation to another. Thus, it contributes greatly to the general progress of society.

Progressive Function of Teaching

- Teaching provides opportunities to recognize and restructure human experiences and as a result of this, there is development of human civilization and culture.

BPS

It may be defined as, Bits Per Second is the unit used for measuring line speed, the number of information units transmitted per second.

Fonts

It is the software that creates a typeface on a computer screen.

Digitizers

It is a machine which converts analog data into digital data on a computer (such as a scanner digitizing pictures or text).

Bit

Bit (binary digit) is the basic unit used to measure the amount of information. A byte or octet contains eight bits.

- 1 KB (kilobyte)- 1024 B (approx. 1000 B)
- 1 MB (megabyte)- 1024 KB (approx. 1000 KB)
- 1 GB (gigabyte) -- 1024 MB (approx. 1000 MB)
- 1 TB (terabyte) – 1024 GB (approx. 1000 GB)

Client and Server

Relationship client - server is defined in the following manner: client sends requests and server responds to those requests. We can use Internet as the best known example. User's computer, connected to the Internet, sends requests to a certain web page (by entering page address into the Internet browser Address bar), and the server responds. Web page is loaded into the user's computer Internet browser as a result of server response. From this example, we can see that communication between client and server depends on connection speed (bandwidth).

DPI

DPI is an abbreviation for Dots per Inch. It is a measure of the quality of output, i.e. the number of dots per square inch produced by a printer or scanner, also referred to as its

resolution. A resolution of at least 300 dpi is considered reasonable for the production of high-quality output by a printer and 1200 dpi by a scanner, but modern printers and scanners can produce many more dots per square inch. The resolution of a scanner may also be expressed by two numbers. These are mostly the same, e.g. 1200 x 1200, but you may also see 1200 x 2400, which means that the number of horizontal dots is different from the number of vertical dots.

Browser

This is a program that enables you to access information on the Internet through the World Wide Web.

Hacker

Hacker is a person who spends their time trying to gain access to information stored on other people's computers all around the world. Some hackers are just harmless browsing types, but other have more invidious aims such as grabbing details of your credit cards or bank account, which may be stored in a file somewhere on your computer. If you access the Internet regularly you should consider installing a Firewall to protect yourself against hackers.

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Dye Sublimation

This is a printing process using small heating elements to evaporate pigments from a carrier film, depositing these smoothly onto a substrate.

De-screening

It may be defined as removal of halftone dot patterns during or after scanning printed matter by defocusing the image. This avoids more patterning and color shifts during subsequent halftone reprinting.

EPS

This is abbreviation of Encapsulated PostScript. An EPS file usually has two parts: a PostScript (text) description that tells a PostScript printer how to output the resolution-independent image, and (optionally) a bit-mapped PICT image for on-screen previews. (EPS files without a PICT preview is usually displayed as a gray rectangle.) EPS files generally can't be edited, even by the program that created them (Illustrator files are exceptions)

Dotted Decimal Notation

It is the convention for writing 32-bit IP Addresses as a set of four 8-bit numbers written in base 10 with periods separating them.

Default Route

This is a routing table entry which is used to direct packets addressed to networks not explicitly listed in the routing table.

Grey Scale

It is a continuous tone image comprising black, white, and grey data only.

FTP site

It is a computer which stores files that can be retrieved using FTP. FTP sites which allow anyone to retrieve files (without having an account on that computer) are known as Anonymous FTP sites.

Disadvantage of Teleworking

- Physical isolation and lack of direct social contact with colleagues
- Not suitable for everyone - requires a certain dose of self-control and motivation
- Less opportunity for advancement due to lack of traditional vertical hierarchy in the company, however horizontal hierarchy is created, where no one is above anyone, but everyone has their own duties and obligations

ISO

It is abbreviation of International Organization for Standardization, the group that developed the OSI protocols.

ISAAC

This is abbreviation of Information System for Advanced Academic Computing. It serves as a clearinghouse for information about the use of IBM-compatible hardware and

software as aids to instruction and research in higher education. Membership is free to all students, faculty, and staff at these institutions.

IP

Internet Protocol is the standard that allows dissimilar hosts to connect to each other through the Internet. This protocol defines the IP datagram as the basic unit of information sent over the Internet. The IP datagram consists of an IP header followed by a message

Interpolation

In the image manipulation context, this is the increase of image resolution by the addition of new pixels throughout the image, the colors of which are based on neighboring pixels.

Interface

It is the way a computer interacts with a user or a peripheral

Inline images

These are graphics that are contained within a document's textual information. In a Web document, these graphics can either be loaded automatically when the page is accessed or loaded manually by clicking on the image's icon.

Installer

It is a utility that copies system software or an application from floppy disks or a CD-ROM to your hard disk. An Installer may also decompress the new files, remove obsolete files, place extensions and control panels in their proper folders, and/or create new folders

Information Technology

It includes matters concerned with the furtherance of computer science and technology, design, development, installation and implementation of information systems and applications

Initializing (formatting)

This is setting up a disk (any kind) to receive information. When a disk is initialized (formatted), its magnetic media is divided into tracks and sectors, and structure files that your computer uses to keep track of data are created.

Inactive Window

It is a window that is open but is not the top window.

Info Path

× It is also called as Internet gopher for the University of California at San Diego.

Image setter

× It is a device used to record digital data (images and text) onto monochrome film or offset litho printing plates by means of a single or multiple intermittent light beams. Color separated data is recorded as a series of slightly overlapping spots to produce either solid areas of line-art or halftone dots for printing continuous tones.

Import

It is the process to bring data into a document from another document, often generated by a different application.

Icon

This is a graphic symbol, usually representing a file, folder, disk or tool.

Image Map

It is a graphic which is divided into regions or "hotspots". When a particular region is clicked, it calls up a web page that has been associated with that particular region.

I-beam

This is the blinking vertical line that shows the point at which text or graphics will be inserted.

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Hypertext

× It is a text-linking strategy that lets you jump between related information in a document by clicking on a button or highlighted word. On-line help systems often use hypertext links, as do some programs designed for the electronic distribution of documents.

Hue

This is the color of an object perceived by the eye due to the fact that a single or pair of RGB primary colors predominates.

Hypermedia

This describes hypertext in which various types of data can be stored - sound, images, video and so on - as regular text.

Hostname

It is a name which officially identifies each computer attached to the Internet.

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Hotlist

This is a file containing lists of Internet Web pages, enabling you to easily access your favorite Web pages.

Highlight

It is the lightest tones in an image. It is a spectral highlight is a bright, reflected light source.

Histogram

This is a chart displaying the tonal ranges present in an image as a series of vertical bars.

Header

It is the portion of a packet, preceding the actual data, containing source and destination addresses, error checking and other fields. A header is also the part of an electronic mail message that precedes the body of a message and contains, among other things, the message originator, date and time.

Handshaking

It is the process computers and modems go through in order to establish a connection and agree on the speed and protocols for data transmission.

Halftone

It is a simulation of continuous tones by the use of black or overlapping process color dots of varying size or position.

Gopher

It is a consistent user interface and gateway into many on-line white pages and other address databases.

Graphical User Interface (GUI)

It is the graphical visual representation of the working environment that presents the elements of your computer as objects on a desktop.

GCG (Grey Component Replacement)

It is a technique for replacing all the neutral tones of an image with an appropriate amount of black

Gateway

It is a special-purpose dedicated computer that attaches to two or more disparate networks and converts data packets from one form to another

Gamma Correction

It is the correction of tonal ranges in an image, normally by the adjustment of tone curves.

Frame-grabbing System

It is a combination of hardware and software, designed to capture individual frames from video clips for further digital manipulation, or consecutive replay on computer platforms

Format

It is a process to initialize a disk to prepare it for use. The disk is checked for errors and organized so that data can be recorded and retrieved. Formatting a used disk erases any previously stored information.

FPO

It is abbreviation of For Position Only. A low resolution image placed in a document to indicate where the final version is to be positioned.

Flatbed Scanner

It may be defined as any scanning device that incorporates a flat transparent plate, on which original images are placed for scanning. The scanning process is linear rather than rotational.

Floating-point Processor

It is a special chip that handles sophisticated calculations, such as those used in spreadsheets, CAD, and scientific programs.

Access and use of ICTs outside school

The relationship between out of school use of ICTs by students, teachers and administrators to in-school use of ICTs in LDCs should be explored in greater depth. Given that confidence in ICT use and ICT-related abilities in school tend to correlate with access to ICTs outside of school, studies examining the differential impact (on achievement, uses and attitudes) of ICT use in schools in rural and urban settings could provide an important contribution to understandings of equity issues in the uses of ICTs in education

Firewall

It is a mechanism that isolates a network from the rest of the Internet, permitting only specific traffic to pass in and out.

Finger

It is a program that displays information about someone on the internet.

File Server

It is a computer that shares its resources, such as printers and files, with other computers on the network. An example of this is a Novell NetWare Server which shares its disk space with a workstation that does not have a disk drive of its own.

FAQ

This is abbreviation of Frequently Asked Questions. It is a document that covers a topic of general concern to many users. FAQs are a good way for new users to get information on various aspects of the Internet.

Executable File

It refers to a file that is a program. It is the executable in DOS and Windows usually have an .exe or a .com extension. In UNIX and Macintosh environments, executable files can have any name.

External Viewer

Program used for presenting graphics, audio and movies while browsing World Wide Web pages via a Web client program. Helper applications are another term for these external programs.

Encoding

It is the file transfer formatting that enables encrypted, compressed or binary files to be transferred without corruption or loss of data.

Encryption

It is a way of coding information in a file or e-mail message so that if it is intercepted by a third party as it travels over a network it cannot be read.

Public private partnerships in cutting 'cut costs' for ICT

Significant work needs to be done related to the costs of ICT in education. All of the claims listed in the related "Knowledge Map" pertaining to costs found in current literature deserve additional scrutiny. There is little credible data related to the costs of using ICTs to support education in developing countries. Few good, reliable cost studies of ICT in

education implementations exist. Those that do exist measure different things, and thus are not easily comparable. While the impact of ICT interventions on student achievement may be difficult to measure, costs explicit and implicit costs of ICT-related educational activities should be measurable.

Dump

It is Back up of data.

Down-Sampling

It is the reduction in resolution of an image, necessitating a loss in detail.

Directory

It is a system that your computer uses to organize files on the basis of specific information.

Disk Defragmenter

This arranges the blocks of information for a file into adjacent blocks on your hard drive, which may significantly improve the file access times.

DIP switches

It is Dual Interface Poll switches allow for either an ON or OFF setting with any number of circuits. DIP switches commonly allow you to change the configuration of a circuit board to suit your particular computer.

Direct connection

This is a permanent communication connection between your computer system (either a single CPU or a LAN) and the Internet. This is also called a leased line connection because you are leasing the telephone connection from the phone company. A direct connection is in contrast to a SLIP/PPP or dial-up connection

Dial-up line

It is a communication connection from your computer to a host computer over standard phone lines. Unlike a dedicated line, you must dial the host computer in order to establish

a connection. Dial-up line is currently the most popular form of Net connection for the home user.

Densitometer

It is a measuring instrument that registers the density of transparent or reflective materials. Colors are read as tonal information.

Dedicated line

It is a telephone or data line that is always available. For example, a leased telephone line can be dedicated for computer data communications. This line is not used by other computers or individuals, is available 24 hours a day, and is never disconnected.

DDN

This is abbreviation of Defense Data Network. A global communications network serving the US Department of Defense composed of MILNET, other portions of the Internet, and classified networks which are not part of the Internet. The DDN is used to connect military installations and is managed by the Defense Information Systems Agency (DISA).

Differential impacts of ICT on education

It is well established that ICTs used in education can have differential impact on boys and girls. However, such research has neglected to explore the possible impact of ICTs on certain subgroups of girls (and boys), and the resulting implications for impact of ICT in education on different types of girls and boys.

Becomes a learning process student centered rather than teacher centered.

Cyberspace

It is a term used to refer to the electronic universe of information available through the Internet.

Cross Platform

It refers to software (or anything else) that will work on more than one platform (type of computer).

Crash

It is a problem (often caused by a bug) that causes a program, or the entire operating system, to unexpectedly stop working.

Coaxial Cable

It is a type of cable that contains two conductors. The center conductor is surrounded by a layer of insulation, which is then wrapped by a braided-metal conductor and an outer layer of insulation

Cookies

It is a file sent to a web browser by a web server that is used to record one's activities.

Learning strategies fostered by the use of ICTs

Research into the types of teaching and learning practices fostered by ICT use (most especially more 'learner centric' pedagogical strategies) and how such pedagogies affect disadvantaged students would also be quite useful.

CGI Prepared by: SATTAM ZAFAR

This is a common Gateway Interface. It is a method of running an executable script or program from a Web server. When a client requests a URL pointing to a CGI, the program is run and the results are returned to the client. This enables dynamic web pages and the ability to do database queries and other complex operations across the web

Caching

It is a process in which frequently accessed data is kept on hand, rather than constantly being from the place where it is stored.

Cache

This is an area of RAM reserved for data recently read from disk, which allows the processor to quickly retrieve it if it's needed again.