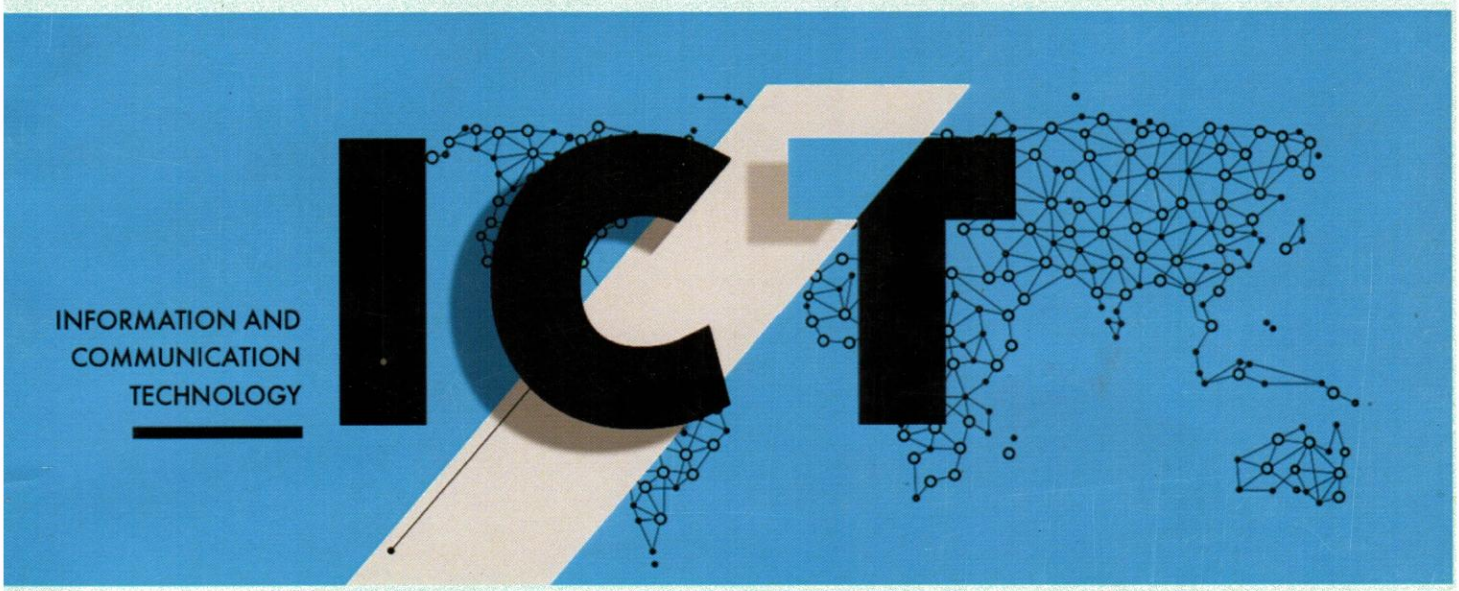
PAC No. 16.40 2017-18

Training of KRPs of DIET on integration of ICT in Teaching-Learning process



Programme Coordinator

DR. SANJAY KUMAR PANDAGALE

विद्यया ऽ मृतमश्नुते

एन सी ई आर टी
NCERT

Regional Institute of Education
(National Council of Educational Research and Training)
Shyamla Hills, Bhopal -462013, Madhya Pradesh
(NAAC Accredited A+ Grade Institute)
Website: http://www.riebhopal.nic.in
Tel:+91-755-2661463; Fax:+91-755-2661668

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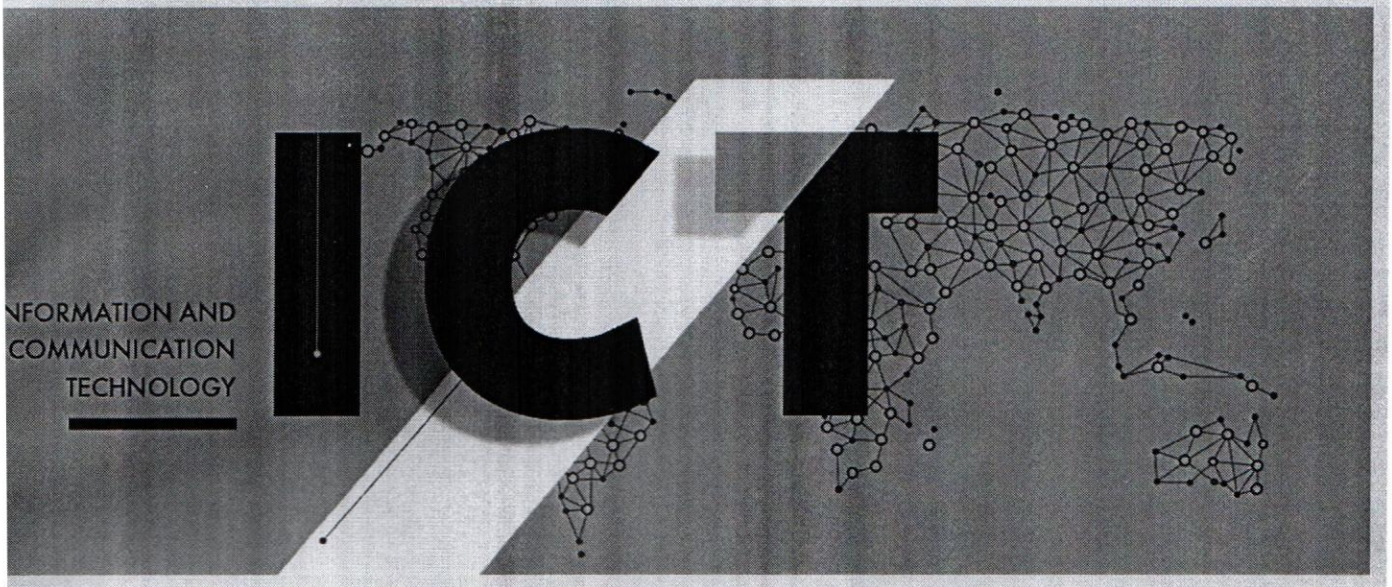

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Foreword

Today's world is a world of technology and education is not indifferent to it. We always suggest our teachers to use ICT in education. However, use of ICT in education depends on availability of hardware/software as well as the knowledge of effective use of this hardware/software. It can be said that the first part related to infrastructure is beginning to reach to the schools due to intervention of SSA, ICT@schools project and various other Government interventions. However, there is a need to concentrate on second part related to effective use of ICT in education, which depends upon proper training. Normally, teachers have often been provided with inadequate training for this task.

Faced with these challenges, how can teachers integrate technology into their teaching? An approach is needed that treats teaching as an interaction between what teachers know and how they apply what they know in the unique circumstances or contexts within their classrooms. There is no "one best way" to integrate technology into curriculum. Rather, integration efforts should be creatively designed or structured for particular subject matter ideas in specific classroom contexts. Honouring the idea, that teaching with technology is a complex, ill-structured task; approaches to successful technology integration require. This training programme initiated to orient and train the teachers in basics of computer and ICT skills. This training programme was conducted during 12 to 16 February 2018 at SCERT Goa.

Dr. Sanjay Kumar Pandagale
Programme Coordinator

Contents

1 Introduction to Computer and ICT

Dr. Sanjay Kumar Pandagale
Associate Professor in Education,
Regional Institute of Education, NCERT, Shyamla Hills, Bhopal-462013
http://wikieducator.org/User:Psanjaykumar
https://www.facebook.com/psanjaykumar
Email- sanjaypandagale@gmail.com
+91-9826296282

ICT in Education: ICTs stand for information and communication technologies and are defined, for the purposes of this primer, as a "diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information." These technologies include computers, the Internet, broadcasting technologies (radio and television), and telephony.

In recent years, there has been a groundswell of interest in how computers and the Internet can best be harnessed to improve the efficiency and effectiveness of education at all levels and in both formal and non-formal settings. But ICTs are more than just these technologies; older technologies such as the telephone, radio and television, although now given less attention, have a longer and richer history as instructional tools. For instance, radio and television have for over forty years been used for open and distance learning, although print remains the cheapest, most accessible and therefore most dominant delivery mechanism in both developed and developing countries. The use of computers and the Internet is still in its infancy in developing countries, if these are used at all, due to limited infrastructure and the attendant high costs of access.

There are many important dimensions to ICT education, including:
ICT/Digital Literacy – Today, everyone needs a basic understanding of ICT and how to make productive use of it, just to be good students, workers and citizens. Teaching people how to be competent basic users of ICT technologies is an important role of ICT education, so they will be successful in their academic and work careers, and so they can efficiently participate in modern technical society. As part of its study validating U.S. Department of Labour IT Competency model content in California, MPICT determined with 99% confidence California employer agreement with the following statements regarding Digital Literacy:

- "Information and communication technologies (ICT) competencies are increasingly important for most of our employers, regardless of role. If there was an agreed-upon standard for "digital literacy", or ICT competencies expected of all workers, regardless of workplace role, my organization would value a credential based on that standard as a way of validating ICT skills for non-ICT workers." (70.5% agree or very much agree)
- "In the 21st century, an ability to work with information and communication technologies is becoming as essential to education, life and workplace success as "reading, writing and arithmetic"." ICT Digital Literacy should be considered a

basic skill by educational systems, something taught to and assessed for all students. (85.2% agree or very much agree)

- This study details 49 competencies for ICT User level knowledge and skills, as an actionable, teachable and assessable definition of what people need to know and be able to do to be "digitally literate."

ICT Infrastructure and Support Applied Technologists – Beyond a basic user competency, our society also needs more knowledgeable and capable technical people to deploy, manage and maintain ICT equipment, software and systems, so they work well for users. In all industries, these people manage computer and communications hardware, software and applications; networked systems; online information sharing, communication and commerce systems; business processes making use of these systems; and user support.

Specialized Business and Industry Uses of ICT – As enabling technologies, ICT is used strategically in almost all businesses and industries. Many have developed specialized systems and uses of ICT, and many have specialized legal and regulatory requirements; quality control systems; integrations with production and research equipment and systems; security requirements; and software applications. For example:

- Bioscience industries rely on specialized ICT systems and applications to conduct research, analyse organic materials, produce biotech products and do required reporting;
- Financial services industries rely on ICT to maintain customer records, do business, conduct trades, do financial reporting, secure proprietary information and comply with regulations;
- Manufacturing industries use specialized computer controlled systems and robotics to design, produce and test products.
- Property management operations use ICT to network and control heating and cooling, lighting and building access systems.
- Electric utilities use ICT to monitor and manage electricity distribution, customer billing and smart metering systems.
- Telecommunications, cable TV and other entertainment industries use ICT to store content, manage customers and deliver their services.

We need to develop a competent workforce that understands not only relevant technologies, but also specialized business and industry environments and operations, to meet these specialized needs.

ICT Research and Development Scientists – ICT fields themselves are under constant pressure to evolve and improve. We need people who deeply understand the science and technologies underlying ICT and who can work to advance the fields.

What is a computer?

A computer is a tool or instrument that helps in computation. Computation includes addition, subtraction, multiplication, division, comparison of numbers, manipulation of texts, logical decisions etc. We use calculators in our routine for carrying out calculations. However, the scope of application of a calculator is thus very limited. A computer, in

contrast, can store a series of instructions and huge information and data in its memory and process a complete job.

Efficiency of the computer depends on the set of instructions given to it. It exactly does what it has been told to do. Precise, clear and correct instructions should be given to the computer to enable it to carry out the operations correctly. When the instructions are faulty and not clear, the results produced by the computer will also be faulty and not clear. This phenomenon of wrong output of data due to wrong input of instructions/data is termed as **Garbage in Garbage out (GIGO)**.

What are the advantages of computer?

- Very high speed processing
- Large capacity for storage and retrieval of data
- Perfect accuracy
- Automatic working capability
- Diligence
- Versatility

What are the limitations of computer?

- Can not think on its own
- Can not learn by experience
- Can not take independent decisions on its own.
- Requires human intervention for each any every step

Classification of computers

Computers are classified into three broad categories basing on – type, purpose, and capacity.

Types:

Analog computers: These are measuring devices that work on volatile data. E.g. Heat, pressure, humidity, speed etc. E.g. Thermometers, barometers, speedometers. These are sensitive to slightest changes.

Digital computers: Deal with numbers; can be used to manipulate data with great accuracy. Take input and give output. Can store large quantities of data. E.g. All electronic computers, calculators, quartz watches etc.

Hybrid computers: Mixture of analog and digital computers. Input is generally in the form of analog form like heat/pressure etc., measured by analog part of computer and then used by digital part for further operations. E.g. Computers used in factories for controlling manufacturing processes, launching a rocket etc.

Purpose:

General Purpose computers: Capable of handling many kinds of operations. Used for both business and scientific applications with equal efficiency. Can be used at any place like offices, banks, schools etc.

Special Purpose computers: Designed to perform specific task and can not be used for other purposes. E.g., monitor patient's health in hospitals, in airports to monitor arrival/departure of flights etc.

Capacity:

Super computers: Very large with very high processing speeds having more number of processing units. These are generally used for complex scientific computations / purposes.

Main Frame Computers: These are large computer systems having capability to support more powerful peripheral devices and terminals.

Microcomputers: Microcomputer is the smallest category of computers consisting of microprocessor and associated storage and input/output devices.

Mini Computers: Relatively fast but small and inexpensive as compared to Main frame computers. A minicomputer can support 10 to 12 terminals.

Personal computers: Designed for personal use. Several models are available in the market. These are very widely used and seen everywhere. Today these are available with very high processing speed and large storage capacity at affordable prices.

Explain the 'hardware'

Hardware is the term given to the physical components of the computer system and various individual pieces of equipment. Thus the key board, monitor, mouse, printers etc., all come under the category of hardware. Therefore, different parts of a computer can be termed as hardware. The functions of hardware are:

- To accept and store the input data in the system.
- To process the data accepted by the system.
- To give the processed results as output to the user.

Parts of a computer : The parts of the computer can be grouped into Input devices, the Processor and the Output devices.

a) **Input devices**: Keyboard, mouse, joystick, scanner, bar code reader etc. are called input devices. Data and instructions need to be entered into the memory of the computer to perform various tasks. The input devices enable the users to input the data into the system, which is processed in the processor and delivers the output.

b) **Output devices**: These are the devices through which the computer can provide the results to the user. Printers, Monitor etc. are output devices.

c) **Central Processing unit (CPU):** All the computing in a computer is done by the Central Processing Unit and the Main Memory of the computer. This is the brain of the computer. The input from the input devices is fed into the CPU for processing. The CPU uses software to process this input and sends the output to the output devices. CPU consists of two parts viz.-

   (i) Arithmetic and Logic Unit (ALU) and

   (ii) Control Unit

Arithmetic and Logic Unit (ALU) : It is the part of the CPU that does all the arithmetic and

logical operations like addition, subtraction, multiplication, division operations such as X > Y etc.

Control unit: It coordinates all the operations of the computer. It controls the input and output devices, the ALU and the memory. It also ensures that instructions in the software are carried out.

Memory Storage: The memory storage is of two types.
(1) Primary Memory and (2) Secondary Memory.

Primary Memory: this is the main memory of the computer, is linked to the CPU, and is part of the base unit. RAM and ROM are different divisions of the primary memory.

a) Read Only Memory (ROM): This is meant for information that is permanently required to run the computer and will remain, even if the computer is switched off. This is important because it contains all the information that the computer requires to start up.
b) Random Access Memory (RAM): This is used for temporary storage. All the data and programs required for running a process are stored here, until the process is over. More RAM storage space can make the computer work faster. The entire data on the RAM is lost when the power is turned off.

Secondary Memory: All the data and programmes which are **not** running on the CPU are stored in the secondary memory. They are copied into the RAM whenever they are required. The commonly used secondary memory storage devices are disks and tapes. There are three types of disks- Hard Disk, Floppy Disk and Compact Disk. Hard disks are fitted into the computer whereas the floppy disks, compact disks can be taken out and kept outside. A floppy can hold only 1.44 MB of information whereas compact disks can hold about 600 MB of data. The floppy drive is referred to as 'A' drive. If there is a second floppy drive on the computer it is referred to as 'B' drive and the hard disk is termed as 'C' drive. The alphabets D, E, F etc., are reserved for additional hard drives that the computer may have.

Some storage devices. :

1. Floppy disk – 3 ½ inch diameter (previously we had 5 ¼ inch floppy disks also): It is divided into concentric circles called tracks and the tracks are further divided into sectors. There is a small hole on the disk called index hole, which denotes the starting point of the first sector. The 3 ½ inch floppy disks can store 1.44 MB or 2.88 MB of information.
2. Hard Disk: The disk consists of a disk pack containing hard disks/platters stacked onto one another. A single hard disk is made of metal and coated on both sides with metallic oxide. Hard disks can store large volumes of data as compared to floppy disks. Today we can see hard disks of capacity of 40 GB to 200 GB and even more. Portable (external) hard disks are also available now.
3. Digital Audio Tape (DAT): This is widely used in our Bank for taking backups particularly in Bankmaster branches. It looks like an audio cassette and can store large volume of data ranging from 2 GB to 20 GB and even more.

4. CD ROM: These are also widely used now-a-days for data storage, storing music, video (cinemas) etc. Compact Disk (CD) can store up to 700 MB of data on it. Rewritable CDs are also available. This is a form of optical storage.
5. DVD (Digital Versatile Disk): DVDs also look like CDs but can store much more data than that in CD. They can store 4.7 GB data on it. Dual layer DVDs can store almost double the data that can be stored on a normal DVD (single layer) i.e., up to 8.5 GB. Data recording is accomplished by burning the laser beam on CDs and DVDs.
6. Pen Drives / Flash Drives: These are also storage media ranging from 256 MB to 8 GB and more. These are very small and portable and easy to carry volume of data.

Explain about 'software'

Software: Computer can not work on its own. It must be given instructions in sequence to work. Such instructions in any computer language is called a computer **programme. Software** refers to the set of programs that control the activity of processing by the computer. The computer software is classified into two broad categories –

a) **Application software**: Also known as application packages. This is a set of one or more programs that are developed or written to do a specific job. E.g. An application package of a company to process its sales data and to generate various sales reports.
b) **System software:** Set of one or programmes, which are, developed to control the operation of the computer system. These programs do not solve specific problems but they are general programs, which help the user in the use of the computer system.

Hardware and software of a computer are interdependent on each other. They are like the two sides of the same coin. The hardware cannot work on its own and the software cannot be used without the hardware.

Explain about 'Operating Systems'

We need a 'system' (a software program) which helps us to use the computer effectively and efficiently. Such a software programme is called "Operating System" (OS) software. Operating System falls under the category of system software. A computer cannot function without an operating system. The OS is the means by which a user can communicate with the computer. All input and output devices, all actions and processes inside the computer are controlled by the OS. The OS communicates the user's instructions to all the parts of the computer.

An operating system is a set of programs designed to manage the entire operations of a computer system. It does not do any specific work but it is a general program, which assists the user by doing the following operations.

Controlling all of the operations including input/output operations, arithmetic operations and internal movement of information.

- □□Communicating with peripheral devices (printers, disk and tape devices).
- □□Supporting the running of other software.

There are many operating systems like Unix, Linux, Mac, MS-DOS, Windows etc.

Explain about the 'Windows' operating system

This is a simple Operating System to learn and use. The user need not memorize or type many commands. We find small pictures called ***icons*** on the screen, which can be used to run programs. This is called ***GUI (Graphic User Interface).*** Microsoft Inc. of USA developed the Windows Operating System. It has undergone many versions such as Windows 95, Windows 98, Windows ME, Windows 2000, Windows XP and the latest version is Windows Vista.

When we switch on the computer, the OS is the first software programme that is loaded. This is called **booting**. After the process of booting first the Windows opening screen and then another screen called ***Windows Desktop*** appears. The small pictures on the desktop are called ***icons***. The icons represent application software that are stored in the computer. The name of the program is written below the icon.

At the bottom of the desktop, we find a grey coloured strip called ***task bar***. On the left of the task bar is a button named ***Start***. The right side of the task bar shows the time. The task bar shows all the programs that are currently running on the computer.

Mouse: We find an arrow shaped pointer on the screen, the movement of which is controlled by moving the mouse. The mouse has two buttons on it. Clicking the left button once indicates a choice or selection. Clicking the left button twice in rapid succession causes the selected application or command to run or begin operation.

When we click on the start button on the task bar, a box with a list of options opens up. This is called a ***Menu***. As you move the mouse over the choices in the menu, the item below the pointer is highlighted.

Window: A window is the part of the desktop that is used by an application software. All application programs that we use will have a window.

- A window has six important parts.
- Border
- Title Bar - contains minimize, maximize, close buttons
- Menu Bar - contains menus with options for different tools
- Tool Bar - contains icons of the tools of application, which are frequently used.
- Large empty white portion - actual working area
- Status Bar - at the bottom of the window.

Files and Folders: When you draw a picture or write a letter using a computer, this picture or letter is stored in digital form as a ***file***. A file is a unit of stored data or programs. It has a file name and a type for identifying it. The names may contain ***file extensions.***

A collection of files kept together is called a ***folder***. It can contain files of many types. Just as files, folders also have names. Folders do not have extensions. A folder can have sub-folders inside it. (Sub-folders are folders within folders.)

Windows Explorer: Windows explorer is an application in Windows 98, which is very useful for finding, storing and working on files and folders stored on the computer. You

can directly open files and folders, create, copy, rename and delete files.

To open Windows explorer,

- Click on the **Start** button.

  Click on **programs** □**Windows Explorer**

The explorer window opens. It has a title bar, a menu bar and a tool bar. Below these, the window is divided in to two halves with a status bar at the bottom.

The left pane shows the different disk drives and folders starting from the desktop. The view seen in the left pane is called a file structure and can be compared to an inverted tree. If you consider the desktop icon as the base of the tree, then all the other folders and drives are the branches. Clicking on any of these drives or folders willopen the folder and shows its contents in the right pane. The right pane shows the content of the drive (sub-folders and files) or folder you have selected in the left pane.

In the left pane, you can see tiny boxes joined vertically containing a **plus (+)** sign or a **minus (-)** sign. Each of these tiny boxes has a horizontal branch with a folder or drive icon attached to it. A plus sign indicates that there are more branches or sub-folders, while a minus sign indicates that there are no more sub-folders. If you click on any plus sign, the smaller branches or sub-folders under that folder or drive can be seen. If you click on a minus sign, all the smaller branches or sub-folders are hidden again.

Creating a new folder: Creating a new folder to save your files is very easy using Explorer. Click on **File** on the menu bar, select **New** and click on **Folder**. A new folder is created now and is seen at the bottom of the list showing the contents of the drive C. The name of the folder is **New Folder** and it is highlighted in a different colour. Click on the highlighted name and enter (type) the required folder name (eg. SBI) and click once outside the folder. A new folder named SBI is created.

When you click on any of the icons in the folder box, the right screen displays the contents of all the folders and files stored inside the icon you clicked. To open any folder or file, move the mouse pointer to the right screen and double click on the selected icon.

The view option: You can change the way the files and folders appear on the main display screen of Windows Explorer. Explorer gives you four options.
Click on the **View** menu. It has four options.
Large icons displays the icons in large size.
Small icons shows the icons in small size on the display. This is useful when there are a large number of items to be seen.
List option shows the icons as a list.
Details option shows the icons as list with details of each file or folder name, size, type and when it was last opened or modified.

Working with files and folders:
Explorer allows you to manage your files and folders with ease.

Selecting files and folders: You can select a file or folder by simply clicking on it. You

can select more than one file if you wish. To select adjacent files, click on the first file. Hold the **Shift** key down and click on the last file you want to select. All the files between the first and the last one you picked will be selected. If you want to select more than one file and they are not adjacent to each other, click on the first file. Hold the **Ctrl** key and pick out the other files you want one by one.

Copy or moving files and folders: Windows allows you several ways of copying or moving folders. You can copy or move files by:

- Dragging and dropping them
- Using the menu option
- Using the icons on the tool bar
- Using key board shortcuts
- Using the shortcut menus that pop up when you right-click on the mouse.

Drag and Drop: Select the file or folder you want to move. Keep the left mouse button pressed. Without removing your finger from the left button, drag the icon and position it over the folder you want this file to be dragged into. Release the button. The file or folder will be placed in the new location.

Cut and paste: Select the file or folder. Click on the **Edit** menu and click **cut.** Open the folder or disk where you want to put this file or folder. Click **paste** on the **edit** menu. The file or folder that you cut has been pasted in the folder in the new location.

You can also use the icons on the tool bar to do this. After selecting the file or folder to be cut, click on the **Cut** icon. Similarly, select the destination and click on the **paste** icon to copy the cut file.

Copy and paste: Select the file or folder that you want to copy. Click on the **Edit** menu and click **copy.** Open the folder or disk where you want to put this file or folder. Click **paste** on the **edit** menu. The file or folder that you copied has been pasted in the folder in the new location. You can as well use the **Copy** and **Paste** icons for this purpose as is done in Cut and Paste process.

Finding files and folders: The hard disk contains hundreds of folders with many files inside each folder. Windows has a program that will help in locating such files.

Move the mouse pointer over the **start** button and right click. A small shortcut menu appears. Click on **Find...** A window opens where the required information is to be typed.

This utility helps you to find files in three ways:

i) Using the name and location of the file.
ii) Using the date on which it was last modified.
iii) Using some text that appears in the file.

The **Name & Location** option assumes that you remember at least some part of the file name. Type the portion you remember in the file name in the box titled **Named:** Choose [C:] in the **Look in** box. Click **Find Now** button. All the files and folders containing the portion of the file name you typed will be displayed for you to find the file you want.

The **Date modified** option is useful when you remember the approximate date on which you created or modified the file you are searching for. Choose this option and fill in the dates between which you remember working on those files Clicking on **Find Now** will list all the files created or modified between the dates you have specified.

The **Advanced** option can be used when you remember the file size or some line of text contained in the file that you are looking for. The **Find** option is also available as part of the **Tools** menu in Windows Explorer.

Some useful utilities:

Computer needs maintenance to work well. The main storage area of the computer is hard disk. Over a period of time, there is a possibility that physical and logical errors can occur in the hard disk. Files in the memory will also require rearranging periodically. Some of these problems can be corrected by a few applications that help keep the memory of the computer in order. The two most useful of these applications are the scan disk and Disk Defragmenter.

SCANDISK: ScanDisk is used to check the hard disk for logical and physical errors. Wherever possible, the damaged areas re repaired. Areas that can not be repaired are identified as bad sectors and are not used for storage. To start ScanDisk click -

- **Start Programs**□
  - **Accessories**□
    - **System Tools**□
      - **ScanDisk**

The scandisk window opens. Click on the check box **Automatically fix errors** so that ScanDisk automatically tries to repair any errors that are detected.

ScanDisk works in two ways. It checks all files and folders and make any corrections, if required. This is called **Standard** scan. This is the option that is selected by default. It can also scan the surface of the hard disk, repair and check for bad sectors, in addition to checking files and folders. This is **Thorough** scan. You can select the drive you want to check, click on the type of scan you want to be done on the drive and click **Start**. The scanning starts and on completion, the results are displayed on the screen. Click on **Close** to return to the ScanDisk Screen. Close ScanDisk. It is advisable to run ScanDisk on the computer at least once a month.

DISK DEFRAGMENTER: This application can be used to rearrange the files, remove gaps and make clear space available on the hard disk for file storage. This will improve the performance of the computer. To start this application –

- **Start Programs**
  - **Accessories**
    - **System Tools**
      - **Disk Defragmenter**

The "Select Drive Window" opens. Select the drive you want to defragment and click on OK. Defragmentation usually takes a few hours. It is advisable to run this application at

least once in a quarter.

COMPRESSING FILES: Files in computers occupy larger space and it becomes difficult to copy them on to a floppy due to their size particularly when the file size is more than the space available on a floppy. Also file handling will be difficult due to their larger size. Hence, compression of a file (also known as **Zipping** a file) facilitates file handling and copying of files easier. There are several programs available that compress files so that they occupy less bytes.

Zipped files occupy less space on any storage device. Hence copying files from one device or drive to another is much faster. Another advantage is that we can group related files into a single folder and then zip it.

Zipping a file: Files can be zipped in two ways. One method is by using Windows Explorer and the other one is by directly using the WinZip program.

Zipping through Windows Explorer : The following steps are to be followed:

a) Open the explorer window
b) Select the file to be zipped
c) Right click on your selection
d) A shortcut menu opens and click on **Add to <filename>.zip**

With this the file will be zipped which occupies considerably lesser space than the original one.

To open a zipped file, you have to first **unzip** it. For this, select the file first and then right click. A shortcut menu appears wherein either select of the two options – Extract to or **Extract to Folder.** In **Extract to** option, you have to choose the folder in which you want to save the unzipped file. The **Extract to Folder** option creates a new folder with the same name as the zipped file and saves the unzipped file in the new folder.

To zip or unzip a group of files, select all the required files and follow the above procedure.

Explain about internet

Computers in an office are networked using LAN (Local Area Network). Computers in different locations are connected by WAN (Wide Area Network). Both these network systems are not for public use and have limited usage. The Internet is a network of thousands of networks. Millions of computer networks are connected to the Internet network and are available to the public.

Internet was invented by American Department of Defense in 1969. Even computers that use different hardware and software can be connected to the Internet.

Minimum requirements for internet:

- A computer
- A telephone line
- A Modem

- An account with an Internet Service Provider (ISP)

The simplest way to connect the computer to the Internet is by using a telephone line. A **modem** (Modulator-Demodulator) converts the digital signals from the computer into analog signals that the telephone lines use. The signals are transmitted over the telephone line and are received by the modem at the other end. These signals are then reconverted into digital signals that the receiving computer can understand.

The computer should be connected to an **Internet Service Provider.** VSNL, MTNL, Tata Telecom and Satyam Online etc. are some important ISPs available. The ISP provides username, password, dial-up numbers from the ISP. Usually the ISP gives an auto-dialler, which can be used for connecting to Internet.

The World Wide Web (Popularly known as Web): The web is organized like a library. It has websites and each web site has a title and a number to identify it. The title of a web site is called a URL (Uniform Resource Locator). It is easy to remember the URL of the web site than its number. The URL of a web site is also called its **address.**

When you open a web site, you see the contents of that window. This is a ***web page.*** The first web page of a web site is called the ***home page*** of that web site. A web page can contain text, pictures, audio visuals etc., these are called ***links***. Links are usually underlined or in a different colour. When you move your mouse pointer over a link, the arrow changes to a picture of a small hand. Using these links from the home page, you can select and view the other web pages containing the topic you want.

A ***browser*** is an application software that helps you search, view and read web sites on the web. **Internet Explorer (IE)** and **Netscape Navigator** are the most commonly used browsers. To see the web site of your choice, you will have to type the address of that web site in the browser. This address is the URL of that web site.

Search Engines: These are web sites available on the internet that provide information on any topic that you want. Search Engines contain a programme that collects information from other web sites. This information is then stored according to the category it belongs to. Eg. Web sites about music will be stored in a category named Fine Arts. Examples of popular search engines are Yahoo, Alta Vista and Google. To view a site of your choice, click on the **Address** box and type the URL of that site and click on **Go** or press **<Enter>**.

The information required from the internet can be copied on to your document. This is called ***downloading***. You can also ***copy*** and ***paste*** text from a web page into your document after highlighting it.

Explain about email (Electronic Mail)

E-mail is the most widely used means of communication today. Messages, pictures and even music can be sent as e-mail over any length of distance to reach their destination computers within minutes at a very lesser cost.

E-mail addresses are different from normal mailing addresses. An e-mail address normally

has four parts. The first part is the name of the user. The second part is the '@ 'sign. The third part comes after the @ sign and is the name of the service provider. The final part is the name of the domain (eg. .com, .net etc.).
Eg. stc.mptm@sbi.co.in

In this, stc.mptm is the name of the user, the second part is @, the third part 'sbi.co' is the name of the service provider and the domain is '.in'.

Sending e-mail: To send e-mail we have to use e-mail application software on your computer. The most popular e-mail software is the Outlook Express. When you click on outlook, express on your desktop the outlook express window opens.

In the lower part of the window, you find 'Folders' pane at the left side. It has a set of folders named **Inbox, Out box, Sent items, Drafts** and **Deleted Items.** The inbox is used to store incoming mail; the outbox is used to store outgoing mail before it is transmitted; the sent items to store mail that has already been sent and the deleted items for deleted mail. The drafts folder is used to store mail that is not yet complete.

To the right of the 'folders' pane, you find two panes. The upper pane contains the list of mails in the folder you have chosen. The lower pane shows you the contents of the mail selected in the upper pane.

To compose a new letter, click on the **New Mail** icon on the tool bar. A new window opens for you to type your letter.

Type the e-mail address of the person to whom you want to send a mail in the **To:** box. Click inside the **Subject:** box. Type a few words about the subject of the letter you want to write. Do not leave the subject box empty. Click on the blank text area and type your letter.

After completing the letter, click on the **Send** icon on the tool bar. Within a few seconds your mail will reach its destination if your are connected to the Internet. If you are not connected to the Internet, the mail will be stored in your **Outbox** and will be sent as and when the internet is connected.

Receiving the mail: Receiving e-mail is also very easy. After connecting to the internet, open Outlook Express. Look for the **Send/Recv** button on the tool bar and click on it. A new window opens and informs you about the incoming messages. After the messages are received fully, this window disappears and you see a number next to the **Inbox** folder in the left pane, indicating the number of messages received. Clicking on the Inbox folder will show a list of all the mails you have received in the right upper pane. Double-clicking on any mail on this list will show you the full mail in a new window.

Sending reply: You can send your reply using the same window. The incoming mail window's tool bar contains an icon named **Reply.** Click on Reply icon. A new window opens with the e-mail address of the person you are replying to along with your e-mail address. The **Subject** box will have the same subject, but with the words **Re:** before it. You can change the subject if you want by clicking on it and retyping a new subject. Click on

the text part of the window and type your reply. A copy of the original message is also available. You can either retain it or delete it. To send the mail click on the **Send** icon on the tool bar. The mail will be sent as described earlier.

Sending attachments: You can attach documents, pictures etc. to your e-mail. These are called attachments. To send an attachment click on **Attach** button (paperclip icon) on the tool bar of your letter window. A new window opens which contains the folders in your computer. Search for the file you want to attach, select it and click the **Attach** button. This window closes and you go back to your mail window. You can see the name of the attachment and file size on a separate Attachment box in the window.

Receiving attachments: If there are any attachments in your incoming mail, you will see a paper clip icon in the list of mails in your **Inbox**. When you open your mail you will also see a separate **Attachment** box with the name and file size of the attachment. Double clicking on this attachment will open a new window for you to save this attachment in your folder you want. You will also have an option to view the attachment without saving it. If you choose the **Save it to disk** option and then click on **OK**, the attachment will be saved in the folder that you want.

Sending copies of the mail: There will be occasions where you have to send copies of the same letter to different functionaries situated at different places. This is just like sending carbon copies of original letter endorsed to others.

To send copies of your mail, look at the **New Mail** window where you are typing your mail. Below the **To:** text box, there is another text box titled **Cc:** (Carbon copy). Type the e-mail addresses of the other recipients in this box, each address separated by a comma. When you complete the mail and click on **send** button, the mail will automatically be sent to all the recipients. In this case, all the recipients will know who the other recipients are.

If you do not want them to know who else have received copies, you can type the addresses in the **Bcc:** (Blind carbon copy) text box. In this case, only you (the sender) will know the identity of all the recipients of mail.

What is Google Drive?

Google Docs is a very powerful real-time collaboration and document authoring tool. Multiple users can edit a document at the same time, while seeing each others' changes instantaneously. Users can produce text documents, slide presentations, spreadsheets, drawings, and surveys. The formats used are compatible with Microsoft Office and Open Office, so you can switch between these programs as needed.

All interactions and files are contained in Google's Internet servers (the cloud), and are accessible from within a web browser window.

By the end of this tutorial, I will be able to:

- Create a Google Account if I do not already have one.
- Create a folder in my Google Docs account to hold documents that I create.

- Create and edit a document and a presentation in Google Docs.
- Move my files to my newly created folder.
- Share my entire folder with a friend so that we can use real-time collaboration.

1. Create and Share a Folder

First of all, you will need a Google Account. If you have one already, you should log in with that account. If you don't, you can create an account on the same page you log into.

Log in to Google Docs

1. Go to http://docs.google.com and log in. If you need an account click **Create a new account now**.
2. Once logged in you will see the Google Docs file manager.

Create a New Folder

1. Create your first folder by selecting the **Create new** text box. Click **Folder**.
2. Give your folder the name "Folder Practice" by clicking in the *New Folder box at the top the page.*
3. Choose any color for your folder in the box to the right. 6. Add the description "My practice folder".
4. Click **Save.**

Share a Your New Folder

1. Share your folder with a classmate by selecting **My folders** on the left hand side.
2. In the main part of the window, click the check box of your folder.
3. Click **Share** and then **Sharing settings...** from the drop down menu.
4. Add a collaborator by email entering their email in the text box labeled **Add people:**
5. Set them to **Can edit** since you want to be able to work collaboratively with them.
6. Click **Share**. They will receive an email immediately with an invitation to work with you on the document.

2. Create and Share a Document

Now that you have created a folder and shared it with a friend, now it's time to create a document to work on together!

Creating a New Document

1. Click on the **Create new** button at the top-left of the page. Select **Document** from the drop down menu.
2. Title your Document "WebTutorialDoc" followed by your initials. To change your document name, click in the box on the top left that currently says **Untitled document** and type your new title. For example, if you are John Smith you would type *WebTutorialDocJS.*
3. Add the heading "My Google Docs Document Practice" to the top of the page. Your cursor should show up at the top of the document if you click anywhere on the page.
4. Centre your heading by clicking on the **Centre align** icon on the tool bar above the document.
5. Change the font of your heading by highlighting the text you wrote and clicking on the drop-down menu on the tool bar that says **Arial**. Choose any font other than Arial.

6. Change the size of your heading by highlighting the text and click on the drop-down menu on the tool bar that says **11pt**. Choose **18pt**.
7. Type a list of personal uses for the *document* application from Google Docs. (Example: use to make flyers. use to make handouts....etc.)
8. Highlight the list you came up with. Find and click on the **Bullet list** icon on the tool bar.
9. Click the **Save** button.
10. Now close your browser window or tab to return to the main window. If the main window has disappeared, click here to get back.

Sharing Your New Document

1. To share the document you just created, select **All items** from the list of locations on right side of the page.
2. Locate your document in the list. Click on the document's check box.
3. Click on the **Folders** drop-down menu and click the check box of your folder from the list. Click **Apply changes**.

3. Create and Share a Presentation

Now that you've created a folder and shared it with a friend, you've created a document to put in the folder, and now it's time to create a presentation.

Creating a New Presentation

1. Click on the Create new button at the top-left of the page. Select **Presentation** from the drop down menu.
2. Add a title to your presentation. Call it "Presentation Tutorial Practice".
3. Add a subtitle to your presentation. Type in your name. Example, if your name is John Doe, type "John Doe".
4. Click on the **Slide** button in the menu bar. Choose **New Slide**.
5. Choose the **Text** slide.
6. Title your slide "Why Use Docs".
7. Type on the left column of slide two. Give it a heading "Reasons to Use Presentation Application".
8. Below the heading you typed, list the reasons you would need to use the presentation application of Google Docs.
9. Type in the right column of slide two. Give it a heading, "Ease or Difficultly using Presentation Application".
10. Below the heading you typed, describe how easy or difficult it was to open a presentation and start using it.
11. Go back to slide one. Click on **Format** at the top-left of the menu bar.
12. Choose **Presentation Settings** and then click on **Change Theme**. Choose a theme of your choice.
13. Add a shape to slide one. Click **Insert** on the top-left of the menu bar. Then click on **Shape**. Choose a shape you would like to add.
14. Click on the **View** button on the top-left. Click **Start Presentation**. Watch your presentation.
15. Close the window your presentation opened in.

16. Give your presentation the name "DocsPresentationNew".
17. Click the **Save** button.

Sharing Your New Presentation

1. To share the presentation you just created, select **All items** from the list of locations on right side of the page.
2. Locate your presentation in the list. Click on the document's check box.
3. Click on the **Folders** drop-down menu and click the check box of your folder from the list. Click **Apply changes**.

4. Evaluate Use in Your Professional Area

Now that you have explored the use of three different components of Google Docs, you are ready to assess their value to you as a professional. Perhaps all three items will be of use to you, or none at all. Please take a moment to reflect on the use of these applications by answering the questions below.

Instructions

1. Go to your Google Docs page.
2. Select **Create New**. Then click on **Document.**
3. Name your document with your last name followed by "TutorialEval." (For example: "DoeTutorialEval".)
4. Title your page "Reflection".
5. Keep this page open for reference to answer the following five questions:

Google Drive is a free service from Google that allows you to store files **online** and access them anywhere using the **cloud**. Google Drive also gives you access to **free, web-based applications** for creating **documents**, **spreadsheets**, and more. Watch this video from Google to learn more about how Google Drive works.

Why use Google Drive?

Google Drive is one of the most popular cloud storage services available today, offering **fifteen gigabytes** (15GB) of free storage space. If you've never used a cloud-based storage service like Google Drive before, take a moment to consider the **advantages** of keeping your files online. Because files can be accessed from any computer with an Internet connection, Drive eliminates the need to email or save a file to a USB drive. And because Drive allows you to **share** files, working with others becomes much easier.

2 E-content and Open Educational Resources

Dr. Anand Kumar Arya
Assistant Professor in Chemistry,
Regional Institute of Education, Ajmer-305004

Introduction

ICT have offered tremendous opportunities for capturing, storing, disseminating and communicating a wide variety of information. Rapid expansion of knowledge and availability of variety of ICT has made knowledge, inclusion and integration of ICT in teaching and learning inevitable for us now. Moreover, ICT has also promoted international collaboration and networking in education and provided more flexible and effective ways for professional development. It can also help in pre-service and in-service teacher training programs. This present module aims to understand the meaning and access of e-content and OER as source of e-content. This module also presents e-content as learning objects, their e-usability and authorized access. The module will also give information about open educational resources, meaning and importance, various OER initiatives and creative common licensing.

E-Content and Open Educational Resources (OER)

Electronic content (e-content) or digital content is the information delivered over network based electronic devices or that is made available using computer network such as internet. According to Oxford dictionary 'e-content is the digital text and images designed to display on web pages'. The e-content includes all kinds of digital content delivered through various electronic media with combination of sounds, images and text. Open Educational Resources (OER) are freely available, openly licensed materials and media that are useful for teaching, learning and assessing as well as for research purposes. Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge.

Concept of OER and licensing

The e-content serve as an effective virtual teacher and is necessary for making teaching and learning effective. However, the many of the educational resources are accessible as they are copy righted. Hence, to make learning resources available to all with no or very less copy right restrictions the courses with open licenses were launched.

OERs are openly licensed digital teaching, learning and research materials that are available in the public domain or under an open license and can be used, re-used and re-purposed for teaching, learning and research. OER includes all the electronic resources such as textbooks, course readings and other learning content; simulations, games, and other learning applications; syllabi, quizzes, and assessment tools; and virtually any other material that can be used for educational purposes. In the context of OER Public Domain means materials for which copy right has expired or for which copy right has been waived off by the author.

The OER are important as

- They offer free access to some of the world's best courses.
- They offer equal access to knowledge and re-usability.
- Provide access to huge amount of study materials anywhere and anytime.
- Accessible and affordable for all.
- OERs are adaptable and allow others to reproduce them for their use.
- Offers for sharing and reusing resources.
- Bridge the gap among formal, informal and non-formal education.

Creative common licensing

The available learning resources are copyrighted and are available under Creative Commons License. The Creative commons (CC) is the popular licensing system having a collection of licenses to suit to sharing content under various conditions.

Advantages of using Creative Commons License are as follows-

- They are easily understood and commonly used. Conditions of a work can be easily understood by the users and re-users of that work.
- It is easy for others to find a CC licensed resource on the Web.
- They have Legal code, Commons code and Digital code.

All Creative Commons Licenses are constructed from a combination of four specific "rights" or conditions that can be reserved by the creator or author of the resource. They are provided below.

Rights or Conditions	Symbol	Explanation
Attribution(BY)		Licensees may copy, distribute, display and perform the work and make derivative works based on it only if they give the author the credits in the manner specified by these.
Share-alike(SA)		Licensees may distribute derivative works only under a license identical to the license that governs the original work.
Non-commercial (NC)		Licensees may copy, distribute, display, and perform the work and make derivative works based on it only for non-commercial purposes.
No Derivative Works (ND)		Licensees may copy, distribute, display and perform only verbatim copies of the work, not derivative works based on it.

Creative Commons Licenses

 **Attribution CC By**	This license lets others distribute, remix, tweak, and build upon your work, even commercially, as long as they credit you for the original creation.

Attribution-ShareAlike CC BY-SA	This license lets others remix, tweak, and build upon your work even for commercial purposes, as long as they credit you and license their new creations under the identical terms.
Attribution-NoDerivatives CC BY-ND	This license allows for redistribution, commercial and non-commercial, as long as it is passed along unchanged and in whole, with credit to you.
Attribution-NonCommercial CC BY-NC	This license lets others remix, tweak, and build upon your work non-commercially, and although their new works must also acknowledge you and be non-commercial, they don't have to license their derivative works on the same terms.
Attribution-NonCommercial-ShareAlike CC BY-NC-SA	This license lets others remix, tweak, and build upon your work non-commercially, as long as they credit you and license their new creations under the identical terms.
Attribution-Non Commercial- No Derivatives CC BY-NC-ND	This license is the most restrictive of six main licenses, only allowing others to download your works and share them with others as long as they credit you, but they can't change them in any way or use them commercially.

(Adapted from: http://creativecommons.org/licenses)

Creative Commons – Various levels of licenses

Icon	Description	Acronym	Free/Libre
	Attribution alone	CC-BY	FULLY FREE USE
	Attribution + Noncommercial	CC-BY-NC	FREE USE- NON-COMMERCIAL

	Attribution + ShareAlike	CC-BY-SA	FREE USE- TO BE SHARED
	Attribution + No-derivatives	CC-BY-ND	FREE USE- NO CHANGES
	Attribution + Noncommercial + Share Alike	CC-BY-NC-SA	FREE USE- NON-COMMERCIAL & TO BE SHARED
	Attribution + Noncommercial + NoDerivatives	CC-BY-NC-ND	FREE USE- NON-COMMERCIAL & NO CGANGES

(Adapted from: http://creativecommons.org/licenses)

National OER initiatives

1. National Repository of Open Educational Resources (NROER)s (http://nroer.gov.in)

National Repository of Open Educational Resources (NROER) is launched by the Ministry of Human Resource Development (MHRD), Government to brings together all the digital resources for a school system such as educational videos, audio, images, documents and interactive modules at national level. It offers resources for all school subjects and grades in multiple languages. NROER enables access to a library from where teachers can access audio, videos, learning objects, images, question banks, activities/presentations and more related to the concepts of the subject that they teach. They can also upload resources which are subject to review by experts. In addition to this, NROER allows teachers to download, share, comment and rate media resources.

Objectives of NROER

- To store, preserve and provide access to a variety of digital resources to students and teachers.
- To engage the teacher community in the development and sharing of digital resources.
- To improve the quality of the education system of the country.
- To facilitate teachers to create and share contextual teaching and learning resources.
- To celebrate innovations in resource creation.

Features of NROER

- Digitization of the content
- Development of e-content in multiple languages along with multiple supportive resources.
- Collaborative creation of e-content
- Widespread dissemination of e-content
- Setting up of state and national level digital repositories
- Development of digital resources as per the National policy on open standards
- Celebrate best practices in content development.

2. **E-Pathshala web portal** (http://epathshala.nic.in)
    - E-Pathshala is a web portal which hosts educational resources for Students, Teachers, Parents, researchers and educators.
    - It contains textbooks and other e-books as E-Pub 3.0 and Flipbooks in English, Hindi and Urdu.
    - It is available through especially developed mobile app interface on Android, IOS and windows platforms for wider access.

E-Pathshala has been developed by NCERT for showcasing and disseminating all educational e-resources including textbooks, audio, video, periodicals and a variety of other print and non-print materials through website and mobile app. The platform addresses the dual challenge of reaching out to a diverse clientele and bridging the digital divide (geographical, socio-cultural and linguistic), offering comparable quality of e-contents and ensuring its free access at every time and every place. All the concerned stakeholders such as students, teachers, educators and parents can access e-books through multiple technology platforms i.e. mobile phones (android, ios and windows platforms), and tablets (as e-pub) and on web through laptops and desktops (as flipbooks).

All the NCERT books have been digitized and uploaded. Currently the e-contents are available in Hindi, English and Urdu. States/ UTs are being approached to digitize and share all textbooks in Indian languages through this platform, which will be done in a phased manner. The Web portal and Mobile App of e-Pathshala was launched by Hon'ble HRM during the National Conference on ICT in School Education on 7th November, 2015.

3. **Sakshat** (http://www.sakshat.ac.in)

Human resource ministry has set up vocational education programme named, Sakshat. One stop education portal for 50 crore users. The programme was formally launched by the President A P J Abdul Kalam on Oct 30, 2006. UGC, AICTE, IGNOU, NCERT, KVS, NVS, CBSE, IITs and IISc has developed the content links for Sakshat The portal has four functional module-

- e-books,
- e-journals,
- digital repository and
- digital library.

This portal offers e-content, media content, spoken tutorial, talk to a teacher and virtual classes facilities under the Sakshat Repository. Sakshat web portal provides downloadable e-content in the form of text, audio and video.

4. **National Program on Technology Enhanced Learning** (http://nptel.iitm.ac.in)

It is a joint venture by seven Indian institutes of technology and Indian institutes of science and funded by the Ministry of Human Resource Development, Government of India to enhance the quality of higher education in the country by developing curriculum-based video and web courses.

5. **Open Source Educational Resources Animation Repository (OSCAR)** (http://oscar.iitb.ac.in/oscarHome.do)

It is web based interactive animations for teaching. It provides a platform for student developers to create animations based on ideas and guidance from instructors.

6. **State OER: Karnataka Open Educational Resources** (KOER) (http://www.karnatakaeducation.org.in)

This is the program designed and implemented by RMSA Karnataka with DSERT for its 'in-service teacher education' component. Mathematics, science and social science teachers have collaborated to create digital learning resources for the new class IX textbook topics for KOER. These learning resources include a concept map, learning outlines, notes for teachers, activities, assessment and project/community project ideas. In each section apart from text, teachers have provided images, videos, slide-shows and animations, through resources accessed as web links. These resources are created/modified/adapted by them, in the line of the OER philosophy of the 4 R's i.e. re-use, re-vise, re-mix and re-distribute.

References

- Module on critical understanding of ICT developed by RIE Mysore (http://www.riemysore.ac.in/ict/)

3 MASSIVE OPEN ONLINE COURSES (MOOC)

Dr. Anand Kumar Arya
Assistant Professor in Chemistry,
Regional Institute of Education, Ajmer-305004

Introduction

Massive Open Online Courses popularly known as MOOC have been gaining popularity among educational professionals. MOOCs are courses online, free of charge that are offered through different platforms. The module explains the relevance and importance of MOOC, along with its structure and availability for various subjects.

Massive Open Online Courses

In Massive Open Online Course is study made available over the internet without charge to a very large number of people. In addition to traditional course materials such as filmed lectures, readings and problem sets, many MOOCs provide interactive user forums to support community interactions among students, professors and teaching assistants. It is a concept of distance education characterized by using Web 2.0 to teach some kind of content to a large number of people through free video lessons that can be accessed at any time or place.

Importance of MOOC

Improving Access: MOOCs are regarded as an important tool to widen access to education for millions of people, for enhancing quality education. MOOCs provides opportunity to reach the not only locally or regionally but globally as well. The courses offered by universities all over the world are accessible to everybody. The affordable technologies has made the MOOCs to be accessed at each level by extraordinary number of courses offered by world-renowned institutions and teachers.

Affordable alternative to formal education; MOOCs offers a full/complete course experience online for free.

Structure of MOOC

The common duration of a MOOC is of 6 to 12 weeks. A MOOC is accessible 24 hours a day, 7 days a week. The majority of the content is delivered asynchronously i.e. students can access it in their own time and at their own pace. However, sometimes there can be optional synchronous events such as 'live' webinars (interactive sessions) which require participant to join in at specific dates/time. A standard class becomes in a MOOC set of videos of 5-10 minutes each. The learning of students in a MOOC is usually assessed by Multiple-choice questions. An important component of MOOCs is assignments. Students have to upload assignment solutions into the MOOC platform. Assignments can be evaluated and graded. Another component is the forum, where students post questions that other students can answer.

MOOC platform of providers

The MOOCs on various subject are available by various institutions. The list of major MOOC providers are:

- SWAYAM / India (https://swayam.gov.in/)
- Coursera / United States(https://www.coursera.org/learn/study-in-usa)
- edX / United States (https://www.edx.org/)
- FutureLearn / United Kingdom (https://www.futurelearn.com/courses/teaching-practical-science-chemistry?lr=1)
- XuetangX / China (https://www.class-central.com/report/xuetangx/)
- Kadenze / United States (https://www.kadenze.com/partners/calarts)
- OpenHPI / Germany (https://open.hpi.de/courses)
- K-MOOC / Korea (https://www.class-central.com/subject/chemistry)

SWYAM

SWAYAM is a programme initiated by Government of India and designed to achieve the three cardinal principles of Education Policy viz., access, equity and quality. The objective of this effort is to take the best teaching learning resources to all, including the most disadvantaged. SWAYAM seeks to bridge the digital divide for students who have hitherto remained untouched by the digital revolution and have not been able to join the mainstream of the knowledge economy. This is done through an indigenous developed IT platform that facilitates hosting of all the courses, taught in classrooms from 9th class till post-graduation to be accessed by anyone, anywhere at any time. All the courses are interactive, prepared by the best teachers in the country and are available, free of cost to the residents in India. More than 1,000 specially chosen faculty and teachers from across the Country have participated in preparing these courses. The courses hosted on SWAYAM will be in 4 quadrants – (1) video lecture, (2) specially prepared reading material that can be downloaded/printed (3) self-assessment tests through tests and quizzes and (4) an online discussion forum for clearing the doubts. Steps have been taken to enrich the learning experience by using audio-video and multi-media and state of the art pedagogy / technology. In order to ensure best quality content are produced and delivered, seven National Coordinators have been appointed: They are NPTEL for engineering, UGC for post-graduation education, CEC for under-graduate education, NCERT & NIOS for school education, IGNOU for out of the school students and, for management studies. Courses delivered through SWAYAM are available free of cost to the learners, however students wanting certifications shall be registered, shall be offered a certificate on successful completion of the course, with a little fee. At the end of each course, there will be an assessment of the student through proctored examination and the marks/grades secured in this exam could be transferred to the academic record of the students. UGC has already issued the UGC (Credit Framework for online learning courses through SWAYAM) Regulation 2016 advising the Universities to identify courses where credits can be transferred on to the academic record of the students for courses done on SWAYAM. SWAYAM platform is indigenously developed by Ministry of Human Resource Development (MHRD) and All India Council for Technical Education (AICTE) with the help of Microsoft and would be ultimately capable of hosting 2000 courses and 80000 hours

of learning: covering school, under-graduate, post-graduate, engineering, law and other professional courses. (from https://swayam.gov.in/about)

Limitations of MOOC

- Limited personalized courseware and attention from a tutor
- difficult to keep track of students' assignments and involvement
- available only in limited language
- limited opportunity for effective assessment methods like Q&A in classroom, surprise quizzes and presentations
- no physical hands-on practical exposures

4 Web 2.0 technologies: An innovative teaching Method

Dr. Sanjay Kumar Pandagale
Associate Professor in Education,
Regional Institute of Education, NCERT, Shyamla Hills, Bhopal-462013
http://wikieducator.org/User:Psanjaykumar
https://www.facebook.com/psanjaykumar
Email- sanjaypandagale@gmail.com
+91-9826296282

Introduction

Today's world is a world of technology and education is not indifferent to it. We always suggest our teachers to use ICT in education. However, use of ICT in education depends on availability of hardware/software as well as the knowledge of effective use of this hardware/software. It can be said that the first part related to infrastructure is beginning to reach to the schools due to intervention of SSA, ICT@schools project and various other government interventions. However, there is a need to concentrate on second part related to effective use of ICT in education, which depends upon proper training. Normally, teachers have often been provided with inadequate training for this task.

Faced with these challenges, how can teachers integrate technology into their teaching? An approach is needed that treats teaching as an interaction between what teachers know and how they apply what they know in the unique circumstances or contexts within their classrooms. There is no "one best way" to integrate technology into curriculum. Rather, integration efforts should be creatively designed or structured for particular subject matter ideas in specific classroom contexts. Honouring the idea, that teaching with technology is a complex, ill-structured task; approaches to successful technology integration require.

At the heart of good teaching with technology are three core components: content, pedagogy, and technology, plus the relationships among and between them. The interactions between and among the three components, playing out differently across diverse contexts, account for the wide variations seen in the extent and quality of educational technology integration. These three knowledge bases (content, pedagogy, and technology) form the core of the technology, pedagogy, and content knowledge (TPCK) framework.

Nowadays with the invention of web 2.0 technology, this is also not a big issue. Web 2.0 technology opened the doors to create potential multimedia content at various platforms easily and free of cost.

What is web 2.0 technology?

Web 1.0 was read-only or static where internet users went online to find information. With Web 2.0, which is read/write or dynamic, people have become active participants and content creators. They not only find information on the Internet, but they also create and share content. The term Web 2.0 was coined in 1999 to describe web sites that use technology beyond the static pages of earlier web sites. It is closely associated with Tim

O'Reilly because of the O'Reilly Media Web 2.0 conference, which was held in late 2004. A Web 2.0 site may allow users to interact and collaborate with each other in a social media dialogue as creators of user-generated content in a virtual community, in contrast to websites where people are limited to the passive viewing of content.

Web 2.0 websites allow users to do more than just retrieve information. By increasing what was already possible in "Web 1.0", they provide the user with more user-interface, software and storage facilities, all through their browser. This has been called "network as platform" computing. Web 2.0 technologies have allowed users to easily publish content online and to connect and network with other people from all over the world who have similar interests. The use of tags particularly enables us to collectively categorize and find content easily. Concisely, Web 2.0 could be characterized by openness, user participation, knowledge sharing, social networking and collaboration, user-created content, and folksonomy (Alexander, 2006; Brown & Adler, 2008; Downes, 2005; Thompson, 2007; Richardson, 2009). Popular examples of Web 2.0 include social networking sites, blogs, wikis, video sharing sites, social bookmarking, etc.

Web 2.0 technologies in teaching and learning

Web 2.0 technologies provide teachers with new ways to engage students, and even allow student participation on a global level. By allowing students to use the technology tools of Web 2.0, teachers are giving students the opportunity to share what they learn with peers. Web 2.0 calls for major shifts in the way education is provided for students. One of the biggest shifts that Will Richardson points out in his book *Blogs, Wikis, Podcasts, and Other Powerful Web Tools for Classrooms* is the fact that education should be collaboratively constructed. This means that students, in a Web 2.0 classroom, are expected to collaborate with their peers. By making the shift to a Web 2.0 classroom, teachers are creating a more open atmosphere where students are expected to stay engaged and participate in class discussions. In fact, there are many ways for educators to use Web 2.0 technologies in their classrooms.

Web 2.0 technologies have "blurred the line between producers and consumers of content and has shifted attention from access to information toward access to other people" (Brown & Adler, 2008, p. 18). Emphasizing a participatory culture, Web 2.0 technologies encourage and enable teachers and learners to share ideas and collaborate in innovative ways. They also force educators to rethink the way we teach and learn and to transform our education practices so that we can support more active and meaningful learning that involves "learning to be" as well as "learning about."

Web 2.0 has the potential to create more interactive and powerful learning environments in which learners become knowledge creators, producers, editors, and evaluators (Richardson, 2009). Learners' critical thinking skills can be enhanced through the opportunity to regularly compare their own contributions to those of their peers, and the affirmation of their relative standing in the class may be powerful motivation for learning (Hurlburt, 2008).

Thus, Web 2.0 technologies has the ability to "support active and social learning, provide opportunities and venues for student publication, provide opportunities to provide effective and efficient feedback to learners, and provide opportunities to scaffold learning in the student's Zone of Proximal Development" (Hartshorne & Ajjan, 2009; Vygotsky, 1978). In addition, Web 2.0 provides numerous opportunities for social interactions and collaboration among students, teachers, subject matter experts, professionals in different fields, as well as a host of others with related interests.

Benefits of using web 2.0 technologies in teaching

The major benefits of using Web 2.0 technologies in teaching include (1) interaction, communication and collaboration, (2) knowledge creation, (3) ease of use and flexibility, and (4) writing and technology skills.

1. ***Interaction, communication and collaboration:*** using Web 2.0 technologies in teaching helps to build a sense of community, increases interaction and communication among the instructor, students, and other people, and promotes collaboration and resource sharing.

- *If used correctly, they can help develop a better sense of connectivity between students and teachers and afford students opportunities to connect and communicate with classmates and resources throughout the world.*
- *They reduce the distance between teacher and students.*
- *Students learn about new ways of collaboration.*
- *Students and teachers see learning as a more social process. It's not just the book and yourself; its collaborative meaning making.*

2. ***Knowledge creation*:** Web 2.0 technologies enable students to become creators of knowledge. Web 2.0 technologies give students the opportunity to create content themselves instead of just listening to lectures, and this supports active and student-centred learning in which students take responsibility for their learning. Web 2.0 technologies create an environment where a teacher becomes a facilitator of learning rather than a distributor of knowledge.

3. ***Ease of use and flexibility***: Web 2.0 tools are easy-to-use and flexible. They remove time constraints by providing a more flexible learning environment that is not inhibited to classroom walls.

4. ***Writing and technology skills***: use of Web 2.0 technologies help students to become more proficient in writing and in the application of technology.

In addition to above four major benefits, using Web 2.0 technologies helps teachers understand a little more about the world of their students, and motivates the students. After discussing about meaning of web 2.0 technologies and there benefits, it's time now to discuss about few such technologies.

Key Web 2.0 services/applications

There are number of Web-based services and applications that demonstrate the foundations of the Web 2.0 concept, and they are already being used to a certain extent in education.

These are not really technologies as such, but services (or user processes) built using the building blocks of the technologies and open standards that underpin the Internet and the Web. As discussed earlier, these include blogs, wikis, multimedia sharing services, content syndication, podcasting and content tagging services. Many of these applications of Web technology are relatively mature, having been in use for a number of years, although new features and capabilities are being added on a regular basis.

* indicates an open source or other, similar, community or public-spirited project.

Blogs

The term web-log, or *blog*, was coined by Jorn Barger in 1997 and refers to a simple webpage consisting of brief paragraphs of opinion, information, personal diary entries, or links, called *posts*, arranged chronologically with the most recent first, in the style of an online journal (Doctorow *et al.*, 2002). Most blogs also allow visitors to add a *comment* below a blog entry.

Well-known or education-based blogs: http://radar.oreilly.com/
http://www.techcrunch.com/
http://www.instapundit.com/
http://blogs.warwick.ac.uk/*
Software:
http://wordpress.org/*
http://www.sixapart.com/typepad/
http://www.blogger.com/start
http://radio.userland.com/
http://www.bblog.com/
Blog search services:
http://technorati.com/
http://www.gnosh.org/
http://blogsearch.google.com/

This posting and commenting process contributes to the nature of blogging (as an exchange of views) in what Yale University law professor, Yochai Benkler, calls a 'weighted conversation' between a primary author and a group of secondary comment contributors, who communicate to an unlimited number of readers. It also contributes to blogging's sense of immediacy, since 'blogs enable individuals to write to their Web pages in journalism time – that is hourly, daily, weekly – whereas the Web page culture that preceded it tended to be slower moving: less an equivalent of reportage than of the essay' (Benkler, 2006, p. 217).

Each post is usually 'tagged' with a keyword or two, allowing the subject of the post to be categorized within the system so that when the post becomes old it can be filed into a standard, theme-based menu system. Clicking on a post's description, or tag (which is displayed below the post), will take you to a list of other posts by the same author on the blogging software's system that use the same tag.

Multimedia sharing

One of the biggest growth areas has been amongst services that facilitate the storage and sharing of multimedia content. Well known examples include YouTube (video), Flickr (photographs) and Odeo (podcasts). These popular services take the idea of the 'writeable' Web (where users are not just consumers but contribute actively to the production of Web content) and enable it on a massive scale. Literally millions of people now participate in

Well known photo sharing services:
http://www.flickr.com/
http://www.ourpictures.com
http://www.snapfish.com/
http://www.fotki.com/

Well known video sharing services:
http://www.youtube.com/
http://www.getdemocracy.com/broadcast/* http://eyespot.com/
http://ourmedia.org/ *
http://vsocial.com
http://www.videojug.com/

the sharing and exchange of these forms of media by producing their own podcasts, videos and photos. This development has only been made possible through the widespread adoption of high quality, but relatively low cost digital media technology such as hand-held video cameras.

Audio blogging and Podcasting

Podcasts are audio recordings, usually in MP3 format, of talks, interviews and lectures, which can be played either on a desktop computer or on a wide range of handheld MP3 devices. Originally called audio blogs they have their roots in efforts to add audio streams to early blogs (Felix and Stolarz, 2006). Once standards had settled down and Apple introduced the commercially successful iPod MP3 player and its associated iTunes software, the process started to become known as podcasting. This term is not without some controversy since it implies that only the Apple iPod will play these files, whereas, in fact, any MP3 player or PC with the requisite software can be used. A more recent development is the introduction of video podcasts (sometimes shortened to vidcast or vodcast): the online delivery of video-on-demand clips that can be played on a PC, or again on a suitable handheld player (the more recent versions of the Apple iPod for example, provide for video playing).

Well known podcasting sites:
http://btpodshow.com/
http://www.audblog.com/
http://odeo.com/
http://www.ourmedia.org/ *
http://connect.educause.edu/ *
http://juicereceiver.sourceforge.net/index.php http://www.impala.ac.uk/ *
http://www.law.dept.shef.ac.uk/podcasts/ *

A podcast is made by creating an MP3 format audio file (using a voice recorder or similar device), uploading the file to a host server, and then making the world aware of its existence through the use of RSS (Rich Site Summary). This process (known as *enclosure*) adds a URL link to the audio file, as well as directions to the audio file's location on the host server, into the RSS file (Patterson, 2006). Podcast listeners subscribe to the RSS feeds and receive information about new podcasts as they become available. Distribution is therefore relatively simple. The harder part, as those who listen to many podcasts know, is to produce a good quality audio file. Podcasting is becoming increasingly used in education (Brittain *et al.*, 2006; Ractham and Zhang, 2006) and recently there have been moves to establish a UK HE podcasting community.

Tagging and social bookmarking

A tag is a keyword that is added to a digital object (e.g. a website, picture or video clip) to describe it, but not as part of a formal classification system. One of the first large-scale applications of tagging was seen with the introduction of Joshua Schacter's del.icio.us website, which launched the 'social bookmarking' phenomenon.

Social bookmarking systems share a number of common features (Millen *et al.*, 2005): They allow users to create lists of 'bookmarks' or 'favourites', to store these centrally on a remote service (rather than within the client browser) and to share them with other users of the system (the 'social' aspect). These bookmarks can also be tagged with keywords, and an important difference from the 'folder'- based categorization used in

traditional, browser-based bookmark lists is that a bookmark can belong in more than one category. Using tags, a photo of a tree could be categorized with both 'tree' and 'larch', for example.

Examples of tagging services:
http://www.connotea.org/
http://www.citeulike.org/*
http://www.librarything.com/ http://del.icio.us/
http://www.sitebar.org
http://www.furl.net/index.jsp
http://www.stumbleupon.com/
http://www.blinklist.com/
http://www.digg.com/

The concept of tagging has been widened far beyond website bookmarking, and services like Flickr (photos), YouTube (video) and Odeo (podcasts) allow a variety of digital artefacts to be socially tagged. For example, the BBC's Shared Tags project is an experimental service that allows members of the public to tag BBC News online items. A particularly important example within the context of higher education is Richard Cameron's CiteULike, a free service to help academics to store, organize and share the academic papers they are reading. When you see a paper on the Web that interests you, you click a button and add it to your personal library. CiteULike automatically extracts the citation details, so you do not have to type them in.

The idea of tagging has been expanded to include what are called *tag clouds*: groups of tags *(tag sets)* from a number of different users of a tagging service, which collates information about the frequency with which particular tags are used. This frequency information is often displayed graphically as a 'cloud' in which tags with higher frequency of use are displayed in larger text.

Wikis

A *wiki* is a webpage or set of webpages that can be easily edited by anyone who is allowed access (Ebersbach *et al.*, 2006). Wikipedia's popular success has meant that the concept of the wiki, as a collaborative tool that facilitates the production of a group work, is widely understood. Wiki pages have an edit button displayed on the screen and the user can click on this to access an easy-to-use online editing tool to change or even delete the contents of the page in question. Simple, hypertext-style linking between pages is used to create a navigable set of pages.

Examples of wikis:
http://wiki.oss-watch.ac.uk/*
http://wikieducator.org/Main_Page
http://wikispaces.com/
http://wiki.cetis.ac.uk/CETIS_Wiki*
http://en.wikipedia.org/wiki/Main_Page*
http://www.ch.ic.ac.uk/wiki/index.php/Main_Page
http://www.wikihow.com

Software:
http://meta.wikimedia.org/wiki/MediaWiki*
http://www.socialtext.com/products/overview
http://www.twiki.org/http://uniwakka.sourceforge.net/HomePage

Online notes on using wikis in education:
http://www.wikiineducation.com/display/ikiw/Home*

Unlike blogs, wikis generally have a *history* function, which allows previous versions to be examined, and a *rollback* function, which restores previous versions. Proponents of the power of wikis cite the ease of use (even playfulness) of the tools, their extreme flexibility and open access as some of the many reasons why they are useful for group working (Ebersbach *et al.*, 2006; Lamb, 2004).

Social Networking

Professional and social networking sites that facilitate meeting people, finding like-minds, sharing content, uses ideas from harnessing the power of the crowd, network effect and individual production/user generated content. Nowadays Facebook is very popular in India as well as in other countries also. These sites can be used to create groups, pages, events, polls, etc, which are very useful in education.

Professional networking:
http://www.siphs.com/aboutus.jsp
https://www.linkedin.com/
http://www.zoominfo.com/

Social networking:
www.myspace.com
www.facebook.com
http://fo.rtuito.us/
https://twitter.com/
http://www.spock.com/
http://www.flock.com/

CMS

A **Content Management System (CMS)** is a computer program that allows publishing, editing and modifying content as well as maintenance from a central interface. Such systems of content management provide procedures to manage workflow in a collaborative environment. These procedures can be manual steps or an automated cascade.

http://www.adaptcms.com/
http://b2evolution.net/
http://www.bedita.com/
http://www.cmsmadesimple.org/
http://www.cmsimple.org/
http://drupal.org/
http://www.joomla.org/
http://www.mamboserver.com/
http://www.tcexam.org/

The first content management system (CMS) was announced at the end of the 1990s. This CMS was designed to simplify the complex task of writing numerous versions of code and to make the website development process more flexible. CMS platforms allow users to centralize data editing, publishing and modification on a single back-end interface. CMS platforms are often used as blog software.

The core function of content management systems is to present information on web sites. CMS features vary widely from system to system. Simple systems display a handful of features, while other releases, notably enterprise systems, offer more complex and powerful functions. Most CMS include Web-based publishing, format management, revision control (version control), indexing, search, and retrieval. The CMS increments the version number when new updates are added to an already-existing file. A CMS may serve as a central repository containing documents, movies, pictures, phone numbers, and scientific data. CMSs can be used for storing, controlling, revising, semantically enriching and publishing documentation.

Document sharing and self-publishing platform

The expansion of the Internet in recent years has provided web users with a robust platform for content sharing -- whether it be files, documents, music or videos, among others. Like never before, the Internet has provided professionals and everyday users alike with the ability to send and receive information quickly and easily.

http://www.calameo.com/
http://www.slideshare.net/
http://www.scribd.com/
http://www.docuter.com/
http://www.wepapers.com/
https://www.zoho.com/rip/zohoshare-eof.html
http://www.edocr.com/

Free websites

Although the modern Internet community is moving towards social networks and clouds, there is still some space for **traditional free web hosting** that enables to publish a *custom web page*, or *custom blog*, or other *"manually" build website* on the web at absolutely no cost.

http://www.webs.com/
http://www.wix.com/
http://www.biz.nf/
http://www.freehostingeu.com/
http://www.biz.ly/
http://www.freehostia.com/index2.html
http://byethost.com/
http://www.x10hosting.com/
https://www.yola.com/pricing?cid=CJ20035

The above web 2.0 technologies are few of the popular web 2.0 technologies. If one, wish to know more such technologies need to visit following sites-
http://pinterest.com/esheninger/web-2-0-tools-for-educators/
http://edudemic.com/2011/11/best-web-tools/

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- http://en.wikipedia.org/wiki/Technological_Pedagogical_Content_Knowledge
- http://www.unesco.org/education/aladin/paldin/pdf/course01/unit_13.pdf
- http://en.wikibooks.org/wiki/ICT_in_Education/Definition_of_Terms
- http://en.wikipedia.org/wiki/Web_2.0
- http://www.jisc.ac.uk/media/documents/techwatch/tsw0701b.pdf
- http://pinterest.com/esheninger/web-2-0-tools-for-educators/
- http://www.edudemic.com/2011/11/best-web-tools/

5 Online Learning Platform: EDMODO

Dr. Vaibhav Jadhav
Asst. Professor in Education,
Savitribai Phule Pune University, Pune

Introduction

E-learning market size was valued over $165 billion in 2015 and is likely to grow at over 5% from 2016 to 2023, exceeding USD 240 billion. This expansion in the economy is valuable but more important is that the great exposure of technology in the education system. Now-a-days, students are more specific to choose education system. They want door step access of all their needs and demands for more learning and understanding their content. Therefore, teacher community must be ready to accept such kind of requirements of students. And hopefully the intervention of technology in education is the way for the new world. If you are looking for such profitable and compatible learning platform, creating and self-publishing courses might be a good idea. It's a great solution for busy learners and a great educational idea if you have something to teach students. The potential you'll have to work hard and create something valuable for students. Once you're settled as a teacher in this field, you'll need a platform to host your courses. Here we are discussing such learning platform i.e. EDMODO.

Objective

1. Explain the concept of online learning platform and various free learning platforms.
2. Describe the nature of EDMODO learning platform.
3. Differentiate between EDMODO Learning platform with others learning platform i.e. Microsoft and Google
4. Install and use of application of EDMODO for the students and teachers.
5. Select their role and use this EDMODO for classroom activities.

Theoretical Frame work

1. What is concept and importance online learning platform?
2. What is the difference between available online learning platform and EDMODO?
3. What are the various application of EDMODO for students as well as teachers?
4. What is the procedure of installing and using of EDMODO?
5. What is the procedure of installing and using EDMODO?

Concept

Online Learning Platform is an integrated set of interactive online services that provides the teachers, learners, parents and others involved in education with information, tools and resources to support and enhance educational delivery and management. In the world wide there are thousands of online learning platforms on internet. Here we are discussing some other free online learning platforms.

Drupal is open source software maintained and developed by a community of over 1,000,000 users and developers. It's distributed under the terms of the GNU General Public License (or "GPL"), which means anyone is free to download it and share it with others.

This open development model means that people are constantly working to make sure Drupal is a cutting-edge platform that supports the latest technologies that the Web has to offer. The Drupal project's principles encourage modularity, standards, collaboration, ease-of-use, and more.

Moodle is the world's most widely used learning management system. Moodle is a massively successful open-source project. Core Moodle has a robust set of teaching & learning tools. Moodle has thousands of regular community contributors pushing the product forward every day. Moodle is free for anyone to download and support, but resources are necessary to maintain the system (that is where we come in!) As a trusted Moodle Partner, a Moodle room makes it easy for institutions to run a successful Moodle-based platform (Joule LMS).

Sakai is a flexible, open-source collaboration and learning environment that provides Duke Faculty and instructors with tools to support teaching and learning activities. Sakai is well established not only as a leading learning management system, but also as an active open-source development community including several of Duke's peer institutions (Stanford, Rice, UNC, etc). Sakai provides a platform for Duke to better integrate new and existing tools, as well providing better support for Duke's growing number of collaborations.

Apache Open Office is the leading **open-source office software suite** for **word processing, spreadsheets, presentations, graphics, databases** and more. It is available in **many languages** and works on all **common computers**. It stores all your data in an **international open standard format** and can also read and write files from other common office software packages. It can be downloaded and used completely **free of charge** for **any purpose**.

DSpace is the software of choice for academic, non-profit, and commercial organizations building open digital repositories. It is free and easy to install "out of the box" and completely customizable to fit the needs of any organization. DSpace preserves and enables easy and open access to all types of digital content including text, images, moving images, mpegs and data sets. And with an ever-growing community of developers, committed to continuously expanding and improving the software, each DSpace installation benefits from the next.

Coursera Every course on Coursera is taught by top instructors from the world's best universities and educational institutions. Courses include recorded video lectures, auto-graded and peer-reviewed assignments, and community discussion forums. When you complete a course, you'll receive a sharable electronic Course Certificate.

edX is a massive open online course (MOOC) provider. It hosts online university-level courses in a wide range of disciplines to a worldwide student body, including some courses at no charge. EdX differs from other MOOC providers, such as Coursera and Udacity, in that it is a nonprofit organization and runs on the free Open edX open-source software platform. The Massachusetts Institute of Technology and Harvard University created edX

in May 2012. More than 70 schools, nonprofit organizations, and corporations offer or plan to offer courses on the edX website. (WIKI)

For the Trainer

Activity 1:- Reading and group discussion: The trainer will ask the participant to discuss the availability of various online learning platforms in their school and follow it with group discussion on all the concepts and sources with their limitation. Review of the different practices of online learning platforms, which are available on various websites and go through that web and discuss. (30min)

Activity 2:- Explore EDMOD online learning platform and according to the classroom's requirements. Participants should install on their laptop and register themselves on EDMODO web page. (30min)

Activity 3:- Find the all the usages of EDMODO regarding the need of their students. And discuss in the group. The trainer will ask to participants that they will install particular application (EDMODO APP) on their smart phone and find the different usages for the students of their classes.

Recourses Required

1. This module on EDMODO
2. This session for different online learning platform for students
3. Introductory Videos
4. Write up on EDMODO
5. Exhaustive list of online learning platforms.
6. The trainer must have known about the development online learning course.

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https://www.edx.org/
https://www.edmodo.com/
https://en.wikipedia.org/wiki/EdX
https://www.learningrevolution.net/sell-online-courses/

6 Creation of Blog and its uses

Dr. Sanjay Kumar Pandagale
Associate Professor in Education,
Regional Institute of Education, NCERT, Shyamla Hills, Bhopal-462013
http://wikieducator.org/User:Psanjaykumar
https://www.facebook.com/psanjaykumar
Email- sanjaypandagale@gmail.com
+91-9826296282

Blogger is an online service owned by Google that publishes single or multi-user blogs created entirely by the user. The service has quickly become the preferred choice of many novice bloggers and is one of the easiest methods of creating and publishing a blog for free.

"Blog" is an abbreviated version of "weblog," which is a term used to describe websites that maintain an ongoing chronicle of information. A blog features diary-type commentary and links to articles on other websites, usually presented as a list of entries in reverse chronological order

Basic Step for creating a blog:

1. Selection of Free blogging platform: There is no. of free or paid services, which enable user to create, his blog with minimum technology knowledge, and premium services. In technical terms a blog required two things-
    a. A domain : address of the blog through which other user can read or access blog
    b. Web space: where all the publish media is hosted on cyberspace
2. User registration: Every user has to register with his credential for the services; generally a user name & Email-id are sufficient for this requirement.
3. Blog creation: Every blog has a unique address, which is selected or specified in this step. User has to select a address for his blog which has not taken yet or available for registration. User can also be asked to choose which Title of the blog, which can be changed in future when required.

Benefits of blogging in education

- Students enjoy blogging
- Blogging enhances literacy skills
- Using a blog makes learning independent of time and place
- It gets students engaged and boost their motivation
- It promotes their communication skills
- Just like other asynchronous media, blogs give time to students to reflect
- It makes teaching students oriented
- It emphasizes the " test and learn" and " learning by doing" strategies instead of " plan and execute " ones
- It fosters the learning bonds between teachers and students
- It gives a chance to shy students to participate with their peers and get their voice heard
- It keeps parents updated about their kids progress
- It enhances home-school links
- It gives students a genuine and potentially worldwide audience for their work.

- Blogging gives students ownership over their own learning and an authentic voice allowing them to articulate their needs and inform their learning.
- It contributes to identity-formation in students
- Blogging helps teachers develop professionally
- It fosters the development of writing and research skills as well as digital skills.

Ways to use blogs in your classroom

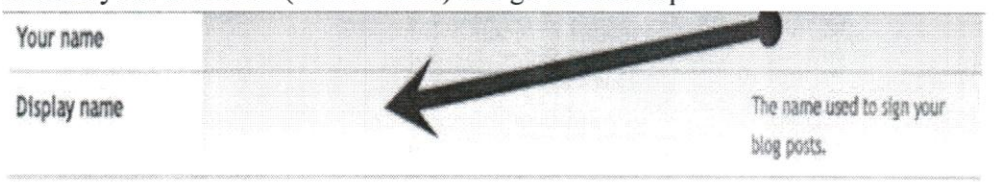
- Here are some ways on how teachers can use blogs in their classrooms:
- Provide further assignments for students to work on
- Have students work in small groups to write and post summaries of content covered in class to build a compendium for content covered over a semester
- Get students to do their writing assignments in the form of blog posts
- Encourage students to post comments on each others postings
- Use blogs for peer learning. Get students to read their colleagues writings and underline spelling and grammatical mistakes
- Use blogs for classroom projects where students can include videos, clips, audio,, text and images
- Teachers can create a specific section just for website links and references to other interesting content online.
- Use activities, games, puzzles to enrich students learning experiences
- Use blogs to conduct an online survey in relation to your students learning needs. You can also include parents in the surveys. Check out these free survey tools for teachers.
- Post your classroom guidelines and code of conduct on your classroom blog for students to review
- Publish a list of the objectives (general as well as specific goals)
- Challenge your students to write, record and post tutorials about certain concepts of things you teach them
- Use a section in your blog for classroom news where to communicate the general classroom news. Work with students to identify the kinds of information they would like to share with their parents, then engage them in writing and posting daily or weekly news updates
- Post weekly challenges such as a riddle or brainteaser that requires your students to think creatively and critically. Ask students to post their answers on the blog then discuss the solutions with the whole class at the end of the week. This will tremendously improve their problem-solving skills
- Again use your blog as a communicative tool both with your students and their parents.

How to Start a Blog on Blogger

Here is a practical guide for creating a blog step by step on Google's blogging Product blogger.com available at free of cost, which is one of the most famous blogging platform used by blogger all over the word.

1. Go to the address bar in browser and open blogger.com

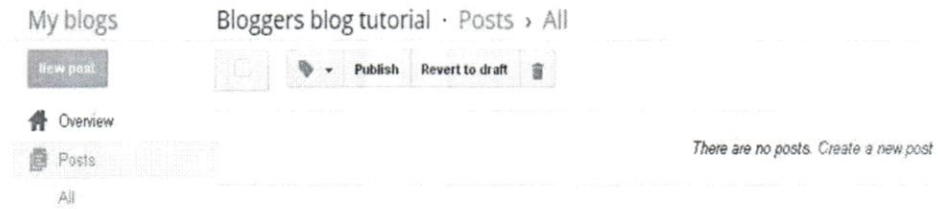
2. Sign in with your registered Gmail id and password or Create a new Google account and login on blogger
3. Choose your username (author name) and go to next step



4. Click on New Blog To create your blog now
5. Choose a title and Address (which is available) for your blog, once you found a available address click toselect on of the templets and click on create blog button
6. Once your blog is created it will display in your blogger homepage, click on your blogs name to go to Blogs Dashboard
7. Dashboard: Your Dashboard, as always, is your starting point. This is where all your blogs are listed, and you can click on the icons next to them to perform various actions on each blog, such as:
    a. Writing a new post: Just click on the orange Pencil icon on your Dashboard to access the Post Editor.
    b. Viewing your posts: The gray Post List icon will take you to a list of your published and drafted posts for a specific blog.
    c. Catching up on your favorite blogs: Below the list of your own blogs, you'll see a list of the blogs you follow with an excerpt from their latest posts.
    d. Everything else: Check out the drop-down menu next to the Post List icon for a quick link to:
        i. Overview
        ii. Posts
        iii. Pages
        iv. Comments
        v. Stats
        vi. Earnings
        vii. Layout
        viii. Template

ix. Settings

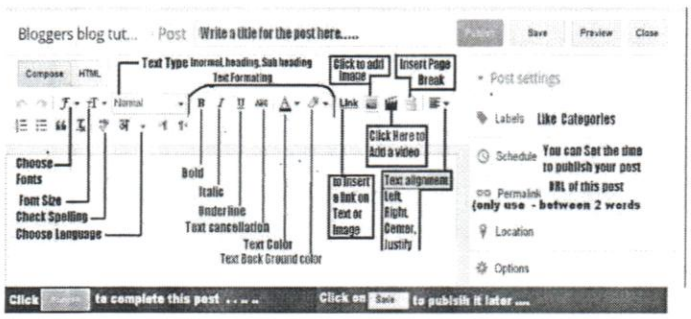
8. Go to Post (Left side Menu): the place where it shows all the post you published, created, and saved in draft, scheduled to publish at some time. Click on New Post to create your first post



9. This is **the Blogger Post Editor** (Just like Microsoft world) where you can place your content (text, Images, Videos, codes etc,) apply formatting on the media. Blogger's post editor has three modes:

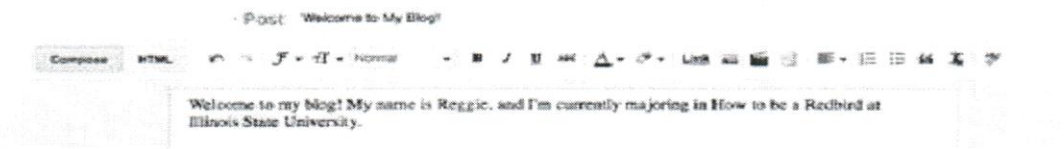
- **Compose:** a wysiwyg mode where you manipulate text with formatting buttons Edit
- **HTML**: a raw mode where you edit the html manually
- **Preview**: renders a full-body preview of the post, including its Title, links and images

Start by giving your post a title (optional), then enter the post itself. When you're done, click the Preview button at the top to make sure it's ready to go, and then click the Publish button to publish your post.



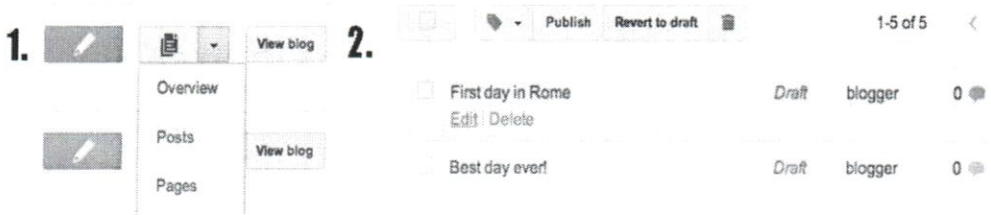
To Create a Post

1. Click the button with pencil on it. When you hover over it it should say Create New Post.
2. Type a title for your post in the post box
3. Type up a post in the post field below the post box



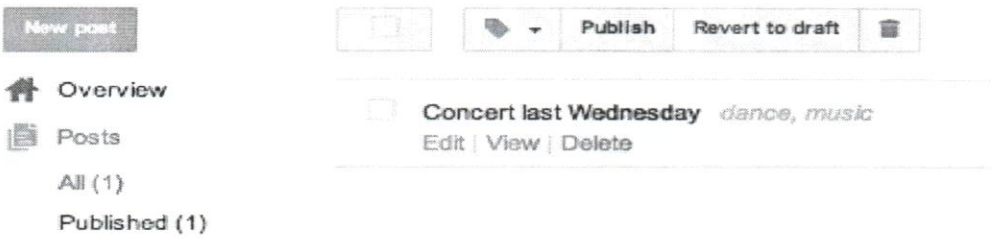
Edit posts

You can edit your posts by clicking on "Posts" from the drop-down menu on your Dashboard. Edit a Post From there, click the "Edit" link next to the post you'd like to edit:

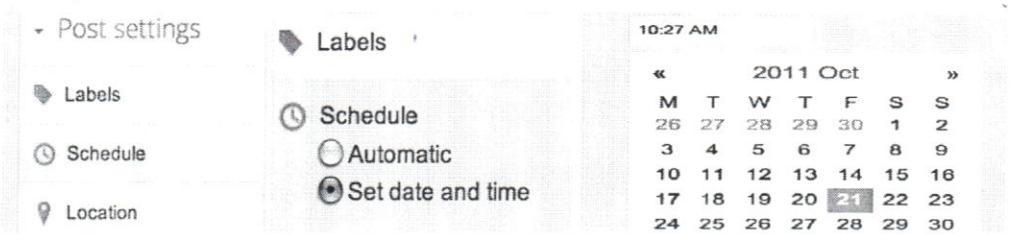


Delete a blog post

To delete a specific post, just go to the Posts tab from your Dashboard, and hover over the post you'd like to delete. The Delete link should appear when you hover -- click that, and then confirm your deletion. To delete multiple posts at once, you can check the boxes next to all the posts you'd like to delete, and click the trash can icon.



Schedule posts:



If you'd like your post to automatically publish at a specific date and time, you can schedule your posts on the Post Editor. Under "Post Settings" on the right-hand side, just click on Schedule. If you select Set date and time, you can choose a date and time on a calendar for

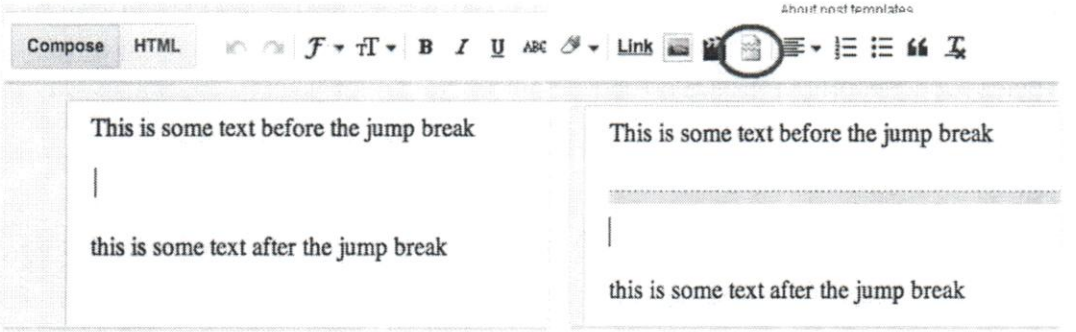
your post to be automatically published. Once you've selected a new date and time, be sure to click Publish.

Draft a post:

A draft is a post that's in progress. It won't show up on your blog, but you can access it from your Dashboard if you'd like to edit and later publish it. To mark a post as draft, simply click Save at the top of the Post Editor when you're done drafting your post.

Create 'After the jump' summaries:

After the Jump is a feature that lets you create expandable post summaries in your blog posts, so longer posts appear as an intro with a link to Read More. Creating jump breaks in your blog posts can be easily done right from the Post Editor, without the need for any HTML changes. First, decide where in the post you want to create the jump break, and place your cursor in that position.



Once your mouse cursor is placed at the jump point, simply click the Insert Jump Break toolbar icon. Clicking the icon will insert a grey bar at the cursor point, illustrating where in the post your break will appear. The bar can be dragged though, so you can always re-position it after insertion.

To Add an image

You can add an image from your computer or the Web to your blog. Click the image icon in the Post Editor toolbar. A window appears prompting you to browse for an image file on your computer, or enter the URL of an image on the Web.

Once you've selected your image, you can then choose a layout to determine how your image will appear in your post:

- The 'Left', 'Center', and 'Right' options allow you to customize the way your blog text will flow around your image.
- The 'Image size' options will determine how large the image will appear within your post.

Click UPLOAD IMAGES to add your image, and then click DONE when the notification window appears telling you that 'Your image has been added.' Blogger will then return you to the post editor, where you'll see your image ready to be published to your blog. You can also publish images to your blog using your mobile device, Google's free photo software Picasa, or a third-party service like flickr.

Add a video

To add a video to your blog post, click the film strip icon in the Post Editor toolbar above where you compose your blog text. A window appears prompting you to 'Add a video to your blog post.'

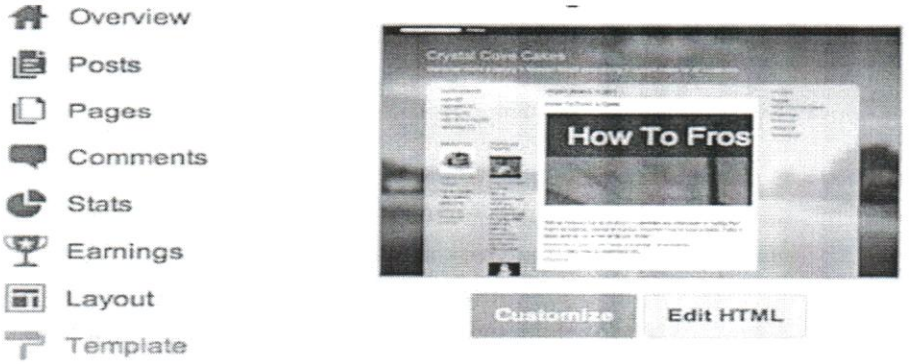
Click Browse to select the video file from your computer that you'd like to upload. Note that Blogger accepts AVI, MPEG, QuickTime, Real and Windows Media files and that your video must be less than 100MB in size.

Before uploading your video, add a title in the 'Video Title' box and agree to the Terms and Conditions (you'll only have to do this the first time that you upload a video with Blogger). Then click UPLOAD VIDEO.

While your video uploads, you'll see a placeholder in the post editor showing where your video will appear. You'll also see a status message below the post editor letting you know that your upload is in progress. Depending on the size of your video, this usually takes about five minutes. When it is complete, your video will appear in the post editor.

Customize

Your template is a fun way to customize your blog. When creating a new blog, you're first asked to choose a default template, this is the basic design of your blog. You can choose from many templates for your blog; simply pick the one that best fits your needs



get started with our easy-to-use WYSIWYG ("What you see is what you get") template designer, or choose one of our many default templates. If you'd like to edit the HTML of your blog, just click the gray Edit HTML button.

Privacy and permissions

By default, your blog is completely public, and can be read by anyone on the internet. However, if you want to keep it private, you can do that, too. You can change these settings on the Settings (Basic tab).

Under the 'Blog Readers' section, you'll probably see 'Anybody' selected as the default. When you change this to 'Only these readers,' you'll get an Add Readers button.

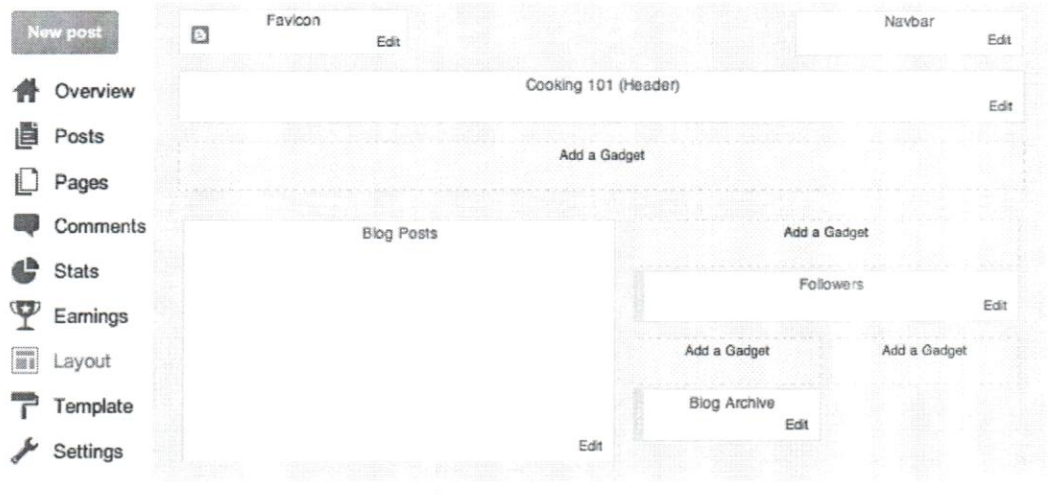
Click the Add Readers button and then enter the email address of a person to whom you'd like to grant access to your blog. To add multiple people, separate their addresses with commas.

For each address entered, the Google Account associated with that address will be given access to view your blog. If an address is not associated with an account, that person will receive an invitation email with a link allowing them do one of three things:

- Sign in to an existing account.
- Create a new account.
- View your blog as a guest (no account required).

Layout Guide:

Blogger's Layout feature is an easy-to-use template editing feature that allows you to edit and customize your Blogger template without any knowledge of HTML or CSS. You can easily edit and customize the colors, fonts, header and sidebar of your blog with a few clicks of the mouse.



Here's an overview of what you can configure when you click Edit for each of these elements:

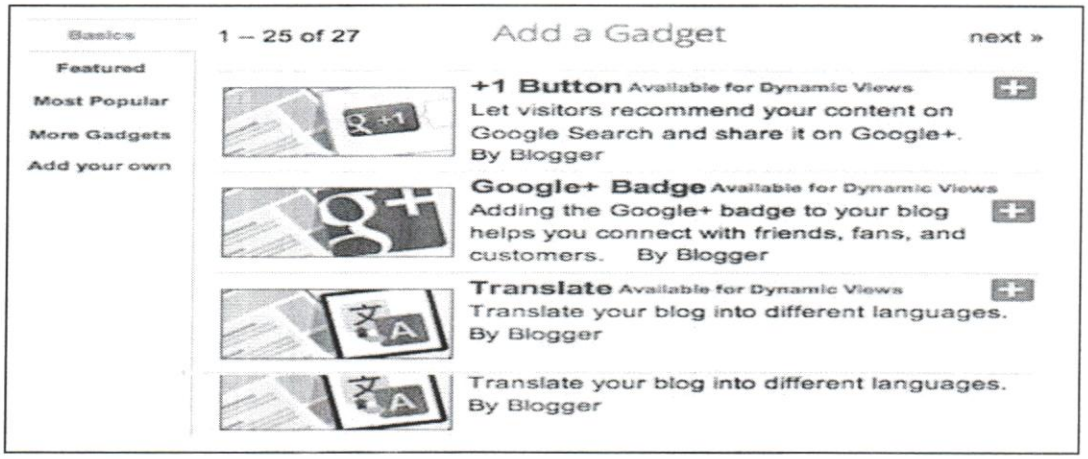
- Navbar: Select the color you'd like your Navbar to be.

- ❖ Header: Add or edit the header of your blog, which includes your blog title and blog description.
- ❖ Blog posts: Choose the number of posts to display on your main page. You can choose either the number of days with posts to display or the total number of posts on the main page. You also have the option to show email post links that let your visitors easily email posts from your blog to their friends.
- ❖ Profile: Edit/add your profile title, 'About Me' description, and location.
- ❖ Blog archive: Edit/add your blog archive title, select your display style (hierarchy, flat list or dropdown menu), choose to display post titles, display oldest posts first, choose your archive frequency (monthly, weekly or daily) and date
- ❖ HTML Gadgets : Edit/add your new rich format content in placed in HTML gadgets
- ❖ Favicon : A small image shown on tab before title in browser, you can add or change it from here

How to add a gadget:

You can customize your blog's design using our intuitive drag-and-drop interface. You can add gadgets to your blog page or sidebar by clicking Add a gadget. This will open a pop-up window. Click + in the proper element section to addIn addition. You can also add powerful gadgets such as slideshows, user polls. To edit your blog's layout, follow these steps:

1. Click Layout from the drop-down menu on your dashboard below the blog you would like to customize.
2. From there, click Edit to edit existing gadgets, or Add a Gadget to add new ones.
3. To add a new gadget after you've clicked Add a Gadget, simply click the plus sign next to your desired gadget. You can choose from gadgets by category, or search for a specific gadget in the top right of the pop-up window.



Pages in Blogger:

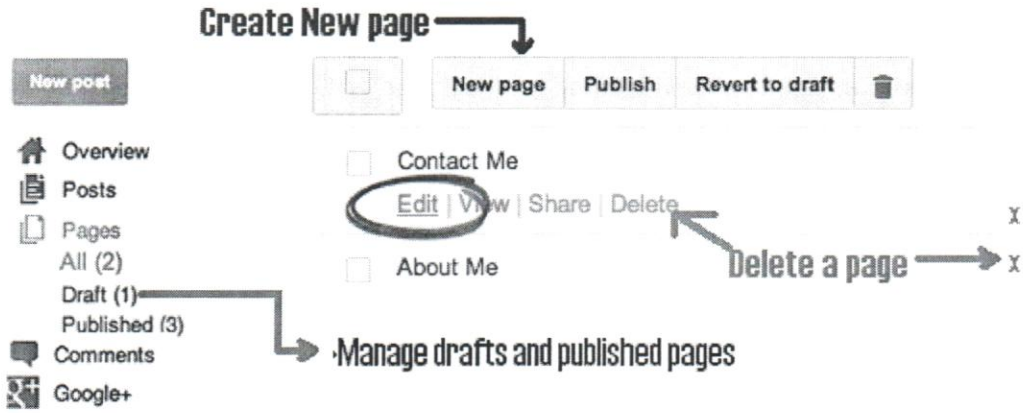
Create a new page

1. Select "Pages" from the left navigation bar on your dashboard.
2. Click New Page.

3. Click Save to create a draft of the page you can review and publish later. You can also click Preview to open a new tab previewing what your new page will look like. Click Publish to create the live page on your blog now.

Edit pages

1. You can edit a page you've created to add new content, images, or videos.
2. Select "Pages" from the drop-down menu of your dashboard.
3. Click the "edit" link below the page you'd like to edit.
4. Make edits to your page
5. Click Update to publish the page with your edits, or Revert to draft to publish the page later.
6. You can also click Preview to open a new tab to see what your edited page will look like.



Delete pages

If you want to delete a page linking to an external site, you have to delete it from within the Pages gadget by clicking the "x" to the right of the link.

Manage drafts and published pages

You can navigate between viewing all your pages, just your drafted pages, or only your published pages using the sidebar on the left of your page. Under the "Pages" section of the sidebar, you should see categories for All, Draft, and Published with the number of pages in that status in parenthesis. You may also see a category for imported pages if you've imported your pages from another platform like Wordpress.

Limits on Blogger

- ✓ **Number of Blogs:** You can have up to 100 blogs per account.
- ✓ **Number of Posts**: There is no limit on the number of posts you can have on one blog. They will all be saved on your account (unless you manually delete them) regardless of whether you are publishing archives or not.
- ✓ **Size of Posts**: Individual posts do not have a specific size limit, but very large posts may run you up against the page size limit. (See the next item.)

- ✓ **Size of Pages**: Individual pages (the main page of your blog, or your archive pages) are limited to 1 MB in size. This will allow for a few hundred pages of text, but it may be a problem if you are listing hundreds of posts on the front page of your blog
- ✓ **Number of Comments**: A post can have any number of comments. As with archived posts, if you choose to hide comments on your blog, all pre-existing comments will remain saved on your account.
- ✓ **Number of Pictures**: Up to 1 GB of total storage, shared with Picasa Web. If you've upgraded to Google+, your photos will be stored in Google+ Photos, where you have 15GB of storage space shared with Gmail and Drive.
- ✓ **Size of Pictures**: If you are posting pictures through Blogger Mobile there is a limit of 250K per picture.
- ✓ **Team Members:** There is a limit of 100 members per blog.
- ✓ **Number of Labels**: Up to 2000 unique labels per blog and 20 per post.
- ✓ **Blog Description**: Limited to 500 characters, with no HTML. Adding additional characters or HTML may cause it to revert to a previous setting.
- ✓ **"About Me" Profile Information**: Maximum of 1,200 characters.
- ✓ **Profile Interests and Favorites**: Maximum of 2,000 characters in each field.

7 Collaborative work with wikieducator

Dr. Sanjay Kumar Pandagale
Associate Professor in Education,
Regional Institute of Education, NCERT, Shyamla Hills, Bhopal-462013
http://wikieducator.org/User:Psanjaykumar
https://www.facebook.com/psanjaykumar
Email- sanjaypandagale@gmail.com
+91-9826296282

What is a Wiki?

The name "Wiki" was chosen by Ward Cunningham -- the creator of the first Wiki. It is a shortened form of "wiki-wiki", the Hawaiian word for quick.

A wiki is a web site that is generally editable by anyone with a computer, a web browser, and an internet connection. Wikis use a quick and easy syntax to allow users to apply formatting to text and create links between pages. This simple formatting syntax means that authors no longer need to learn the complexities of HTML to create content on the web.

The main strength of a wiki is that it gives people the ability to work collaboratively on the same document. The only software you need is an Internet browser. Consequently, wikis are used for a variety of purposes. If you make a mistake, it's easy to revert back to an earlier version of the document.

Examples of Wikis

The largest and most talked about Wiki on the Internet is Wikipedia. Wikipedia is, for the most part, editable by anyone in the world with a computer and an internet connection and, as of Nov 2008, contained over 10,000,000 articles in more than 250 languages. Two and a half million pages in English! There are also more than 250,000 articles in German, French, Polish, and Japanese; and more than 100,000 articles in Spanish, Italian, Dutch, Portugese, Russian, Swedish, and Chinese. While Wikipedia's mission is to create an encyclopedic resource of knowledge, wikis can be used for a variety of purposes and are quickly becoming the de-facto technology for collaborative group work online. They can be great social tools for classrooms, teams, community groups, or can even be configured to provide easily updatable web sites for organizations.

The following wikis display a range of different applications of wiki technology:

- Wikitravel- a project to create a free, complete, up-to-date, and reliable world-wide travel guide.
- WikiWikiWeb - the first ever wiki, it has been around since 1995.
- AKOWiki- an evolving site to provide a bit of help with technology, ideas and teaching to staff in an institution. Lots of single issue pages, not much hyper linking.
- Scholarpedia - a wiki project based on a system of peer review.

There are literally thousands of wikis around the web on a diverse range of subjects and supporting many communities.

Interesting uses of Wiki technology

- British Council Case Study on using a wiki technology to promote collaboration at the office.
- Conference planning, see for example Wikimania 2006
- Wiki as an online presentation tool demonstrated by Meredith Gorran Farkas, a distance education librarian.
- Open Streetmap is a wiki project to provide free geographic data such as street maps to anyone who wants them.
- Distinguishing between types of wiki communities - the difference between "above-the-flow" and "in-the-flow" wikis.
- The Wealth of Networks WikiNotes - This Wiki is an invitation to collaborate on building a learning and research environment based on Yochai Benkler's book, The Wealth of Networks: How Social Production Transforms Markets and Freedom, available under a Creative Commons Attribution Noncommercial Sharealike license.
- Other uses include:
    - Meetings (Posting of agendas, prior meeting discussions, minutes)
    - Documentation for collaborative projects
    - Web space for personal note taking
- If you find a really interesting use of a wiki - please feel free to add this to the list above.

Advantages

- anyone can edit
- easy to use and learn
- Wikis are instantaneous so there is no need to wait for a publisher to create a new edition or update information
- people located in different parts of the world can work on the same document
- the wiki software keeps track of every edit made and it's a simple process to revert back to a previous version of an article
- widens access to the power of web publishing to non-technical users
- the wiki has no predetermined structure - consequently it is a flexible tool which can be used for a wide range of applications
- there are a wide range of open source software wiki's to choose from so licensing costs shouldn't be a barrier to installing an institutional wiki

Disadvantages

Advantages in one context, may be disadvantages in another.

- Anyone can edit so this may be too open for some applications, for example confidential documentation. However, it is possible to regulate user access.
- Open to SPAM and Vandalism if not managed properly. There are easy ways to restore a page however, and on WikiEducator you must be logged in to edit pages so this reduces vandalism by automated spam bots.

- Requires Internet connectivity to collaborate, but technologies to produce print versions of articles are improving
- The flexibility of a wiki's structure can mean that information becomes disorganised. As a wiki grows, the community plans and administers the structure collaboratively.
- The usual guidelines for healthy computer use apply.

Creating an Account

The process of creating an account on WikiEducator is very similar to registering for an account on one of the free email services like Yahoo Mail or Gmail.

Everyone is welcome to read or use WikiEducator content, regardless of whether they choose to register. However, you must have a registered username in order to edit articles, including your user page.

The free registration gives you many benefits, including increased editing options and user preferences. One handy feature is the **Watchlist**, which makes it easier for you to track changes to pages you are interested in. Another is the ability to create, move or rename pages.

Registration also provides you with a detailed history of all your amazing work in WikiEducator by associating all your edits to your User name. This is partly for reasons of accountability but it is also helpful from a copyright perspective: if someone wants to use your contributions in a way not allowed under the WikiEducator copyright, they can ask you on your Talk page, for example. Also, the Creative Commons license used on WikiEducator encourages giving appropriate credit to authors, and your username is used to give that credit.

If you register, do not forget your password or your User name. If you're prone to forgetting these, make sure you enter your email address and verify it when you sign up so you can have a new password sent to you if you forget your current one.

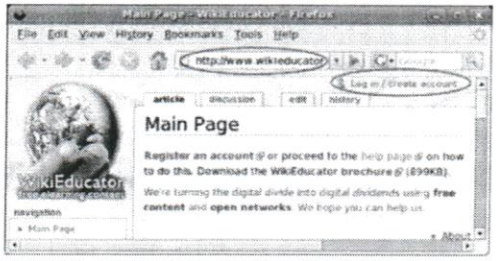
In the next section we will go through detailed step-by-step instructions on how to create your WikiEducator account.

Creating an account is quite easy. As you work through the detailed steps provided here, remember to read the instructions provided on-screen. These are a great help for Newbies to WikiEducator. However, if you feel you would benefit from a little more guidance, carry on reading!

Step 1: Getting to the "Create account" page

Your first activity is to get to the right page where you can create a new account. This is accessed from WikiEducator's home page.

Activity



Enter http://www.wikieducator.org as your URL and click on the "log in /create account" link highlighted above. An Internet connection is required for this activity.

- Open a new browser window (e.g. Firefox, Mozilla, Safari, Internet explorer).
- Direct your browser to the WikiEducator home page: http://wikieducator.org by typing in the following website address:
  http://www.wikieducator.org
  Remember to press your <enter> key.
- On the top right hand corner of your screen, you will see a link called "log in / create account"
- Clicking on this link will take you to the "Create account" page.
- Follow the instructions provided on screen, or read further.

Visit the **Show me how** video for a practical demonstration. (Not advised for low bandwidth connections.)

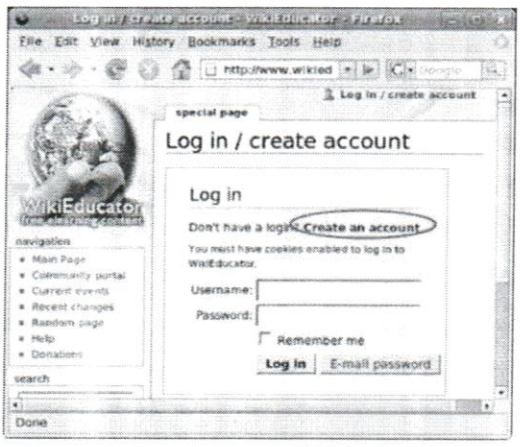
Step 2: Click on the "Create an account" link

WikiEducator distinguishes between two types of users:

1. Users who already have a log in account
2. New users who don't yet have an account. (As you are working through this tutorial we expect that you fall into this category).

The next activity demonstrates how new users can get to the correct screen for creating a **new** account.

Activity



Click on the "Create an account" link shown Click on the blue "Create an account" link.

Tip: Remember that you must have an account with WikiEducator before entering details into the Username and Password text fields. In training workshops, we have noticed that some participants enter a Username and Password at this time **before** creating an account on WikiEducator. WikiEducator will not recognise these details unless you have previous registered your login details with WikiEducator. Once you have created an account on WikiEducator you can fill in your Username and Password on this screen to log in.

- If you make a mistake, don't worry - just follow the steps again and click on the blue "Create an account" link.

Visit the **Show me how** video for a practical demonstration. (Not advised for low bandwidth connections.)

Web sites that accept postings from the public, like this wiki, are often abused by spammers who use automated tools to post their unwanted links to many sites. As a mechanism to deal with this problem, WikiEducator uses a Captcha feature to prevent automated spam on the site.

When you create an account for the first time on WikiEducator, you will see a graphic displaying distorted text characters (see screenshot image below). Computers cannot "read" the letters displayed in the graphic, so they must be entered by a human. In this way we can manage the electronic spam problem where computers search the Internet hoping, for example to publish unwanted advertising on different sites.

Dealing with the Captcha

In the next part of this activity, we will show you how to enter the letters from the Captcha feature before completing your registration particulars.

- The first step is to decipher the letters displayed in the graphic, and to enter these in the text box provided below the distorted characters. Note that these are case sensitive which means that you must use both capital (uppercase) and lowercase letters when indicated in the Captcha graphic. Check to see that your <Caps Lock> key is off.
- In the example below, the letters **wintmund** are displayed in the graphic. The user must type the same letter combination in the text box provided below. When you create your account, you will inevitably be given a different combination of letters, so don't use the same letters provided in this example.

Tip: Sometimes the letters are hard to decipher. There are two things you can do:

- Try changing the distance between your eyes and the computer screen. This will help to improve your focus in order to decipher the letters.
- If you find the letters are too difficult to decipher, press the "Refresh" button of your browser so that WikiEducator generates a new combination of letters, which may be easier to read.

Choose a Username

- After typing in these letters, choose a Username for yourself. Choose a username that is easy for you to recall. Many people like to use a shortened version of their name or alternatively a combination of initials and surname. For example, Wendy Green may choose the Username: **wgreen**. Remember that most systems are case sensitive, so you will need to remember whether you have used capital or small letters. This is the Username you will use every time you log in to WikiEducator.

Choose a Password

- You will now need to choose your own password for WikiEducator. Enter this in the space provided. To avoid typing errors with your password, you are required

to re-enter your password immediately after the first password box. Remember that passwords are also case sensitive.

Email address

- Type in your email address. This is optional, however it is useful to enter your email address because in the event that you forget your password, the system will be able to email this back to you on request.
- Type in your real name. This field is also optional, and is used for attribution purposes when people want to cite or use content you have created on WikiEducator.

- Don't worry if you make a mistake with deciphering the letters. If you get this wrong the system will automatically provide you with a new combination of letters you can try. If you get stuck, ask someone to help you or read the instructions provided on screen.

Visit the **Show me how** video for a practical demonstration. (Not advised for low bandwidth connections.)

Editing Basics

With the exception of a few protected pages, every page on WikiEducator can be edited if you have registered a user account.

How do I know the difference?

Every page that is editable will have a link along the top of the main content area that says "edit". Pages that are locked for editing will be substituted with a "View source" tab. Don't worry about this detail now - finding your way around a wiki page will become second nature.

Tip: Remember that on WikiEducator you cannot edit a page without a valid user account. On some wiki's like Wikipedia, you can edit a page without a valid user account. However, in Wikipedia you can't create new pages without a user account. In the case of pages which are locked for editing, you can always copy the source text by clicking on the "View source" tab.

Where are the edit links?

You will find the main edit link as a page tab, above the content area of a page. On pages that have subheadings, you will also find an "[edit]" link next to the heading to edit that particular subsection of the page. The edit links let you do exactly that: edit an entire page or single section within a page.

It's really up to your individual writing/reading style but the more familiar you become with editing and editing tools, you are bound to find efficiencies that work for you.

You will find the main edit link between the "discussion" and "history" tabs above and one next to each subheading. If you've missed one, don't worry. We'll point these out more clearly in the next subsection. Note that the "Edit mode" and "First Edit" links in the navigation bar above are the names of sub-pages in this tutorial and not Wiki edit links.
Editing is a unique feature of wikis. Wiki's enable people to edit web pages right from within the web page itself. In this tutorial, we will look at the most basic steps required to begin editing pages on the wiki and make our first edit to a special page called the User page.

Edit mode
A wiki page has two modes:

1. The **published mode** - the view you are looking at right now; or
2. The **editing mode** - which you use when editing text on the wiki

To activate the edit mode, you need to click on one of the **edit** links that appear on any wiki page. If you are planning to edit the whole page at once, click on the edit tab, which you will find at the top of the page in your browser. This link is useful when working with new or short pages that do not have too much text. In the case of long articles, it may become difficult to find the appropriate place to edit.

The Mediawiki software also has a useful feature on pages that contain subheadings. You will notice an **edit** link displayed next to each subheading on the right side of the page. You can use this link when you want to make changes to just the relevant subsection.

When you click on one of the **edit** links, the page you are on will change into **edit mode**. **Edit mode** displays the raw wiki text of the page you are on inside a special text area box. This is where you enter new content or modify existing content in the wiki. In the next section, we will make our first edit on the wiki.

Basic Text Formatting
Now that you have made your first edit to your User page, we will look at some of the basic formatting features available to you on the wiki.

1. Two ways to format text
WikiEducator uses a kind of simple text markup to format particular elements of the page (e.g. bold, italics, headings, etc). This "language" is known as Wikitext (or Wiki-markup) and is designed for ease of editing.

Much of this simple formatting can be added to your content by: (1) using the Editing Toolbar that appears while you are in editing mode and / or (2) typing the syntax by hand. Note that the entire set of wiki formatting options are not available on the Editing Toolbar, so you will need to learn how to enter some of this syntax by hand. This will be useful

information for more sophisticated formatting options (and devices) that will be dealt with in later / advanced tutorials.

2. Creating your own practice area

Don't skip this activity

The very first thing we need to do is to create a personal practice area for all your edits. We call this a sandbox, do please move onto the next section: Creating a sandbox (before proceeding with this tutorial).

Bold, Italics & Heading (Using the Editor Toolbar)

When you were editing your User page in the previous section's activity, you may have noticed that the editing area has a blue bar at the top that contains a series of graphic buttons like this:

This is the Editing toolbar and can be used to add simple formatting to your content.

Tip: To use the toolbar you will need to use your mouse to *highlight and select the text* upon which you wish to apply the formatting. To highlight and select a piece of text, click and hold with your left mouse button while moving your mouse across the text you wish to select. (If you have no left mouse button, don't worry, you don't need one for this.) The highlighted text will turn into a different colour; release the button when you have highlighted the selection of text to which you would like to apply formatting.

Once you have your text selected you can click on:

- the Bold button  to bold the selection;
- the Italics button  to italicize the selection;
- or the Headline button  to create a level 2 headline from your selected text.

Your formatting will not appear while you are in the editing mode. To see your formatting applied you will need to click on the **Show preview** button or the **Save page** button.

Activity

In this activity we'll use the graphic toolbar

- Go to the sandbox you created under your User page. (See this Activity on the previous page.)
- Click on the Edit tab.
- Copy the following sentence or something similar: This word is bold and this word is italics.
- Highlight the word you want to appear in bold and click on the Bold button  .
- Highlight the word you want to appear in italics and click on the Italics button 
- Click on the save button.

Using Wiki Syntax

If you have tried using the editing toolbar to apply formatting to some text, you may have noticed that the act of clicking on a button actually *wraps* your text inside some common grammatical characters. These characters are used by the wiki software to indicate where formatting is to be applied. Once you are familiar with some of the basic formatting syntax, you may find it quicker and easier to just type this syntax into the edit mode text area rather than highlighting, selecting and clicking on the buttons.

Overview

Description	You type	You get
Bold text	This is '''bold''' text	This is **bold** text
Italics	This is ''italics''	This is *italics*
Bold and Italics	This is '''''bold and italics'''''	This is ***bold and italics***
Indents	:This is indented	This is indented

Description	You type	You get
Headings of different levels	=level 1= ==level 2== ===level 3=== ====level 4==== =====level 5===== ======level 6======	Level 1 Level 2 **Level 3** **Level 4** **Level 5** **Level 6**

Bulleted and Numbered Lists

There are two types of lists that can easily be created in the wiki. The first is a bulleted list (sometimes called an unordered list), and the other is a numbered list. There is no button on the Editor toolbar to create lists so you will need to create them by hand using this simple syntax.

Description	You type	You get
Bulleted list	* one * two ** two point one * three	• one • two ○ two point one • three
Numbered list	# one # two	1. one 2. two

## two point one # three	1. two point one 3. three

In short, bulleted lists are created by using asterisks (*), while numbered lists are created using hashes (#). Notice that you can also embed or nest lists within other lists by adding more asterisks or hashes like this:

Bulleted list

* lists are easy
* start each line
* with an asterisk
** or two
** to nest a list

* lists are necessary
* lists are useful
* lists should be used
  - lists are easy
  - start each line
  - with an asterisk
    - or two
    - to nest a list

Numbered list

You will use the following syntax for a numbered list:

ordered lists are good
and very easy to follow
like this
and this
ordered lists are good
and very easy to follow
should be utilised

1. ordered lists are good
2. and very easy to follow
    1. like this
    2. and this

Activity

Make a **To Do** list in your sandbox and list some of the tasks you would like to attend to in the wiki or need to complete today. Experiment with "nested" bullets and number lists - that is sub-elements of your list.

Tip: Some common mistakes that you can avoid include:

- Leaving a space before the asterisk (*) - the asterisk must be place against the left margin.

- Leaving an open line between two items in a numbered list - in this case the numbers will not continue in sequence.

Mixing list types

Self Assessment

Is it possible to mix types of lists? For example nested bullets in a numbered list.

Yes it is possible to mix list types as in the example below.

3. The first item in the list
4. The second item in the list
    - The first nested bullet
    - The second nested bullet
5. The third item in the list

This is the syntax we used for the example above:

```
# The first item in the list
# The second item in the list
#* The first nested bullet
#* The second nested bullet
# The third item in the list
```

```
# The first item in the list
# The second item in the list
* The first nested bullet
* The second nested bullet
# The third item in the list
```

New Pages and Links

Now that we've made our first edit, and explored a few text formatting features it will be useful to learn how to create new pages and how to link these pages together. In this tutorial we will look at how to create a new page and how to add links in the wiki to both pages within the wiki and outside to sites in the World Wide Web.

The Structure of the Wiki

You should think of a Wiki as a collection of individual pages. These pages can be linked with each other in different ways.

Wikis often display a type of flat organizational structure, without much hierarchy existing between pages. Hyperlinks connect one page to another, and content can tend to emerge in a rather organic fashion. While this can suit much of the content on the site, it may sometimes be desirable to group pages along a more hierarchical structure, where sets of pages are viewed as siblings of others. For the most part, the flat structure is sufficient, but we will explore how to create hierarchical structures in Tutorial 10, as this may be of benefit when creating educational resources.

Deciphering the language of links and pages

The differences between links and pages can be confusing. Therefore before we start with the tutorial, let's consider the basic concepts that will be used.

Key points

It can be useful to think about the things you might want to do in relation to pages and links:

- Creating an **internal link** between existing pages, for instance creating a link on Page A to Page B, where both pages already exist in the wiki;
- Creating an internal link to a **new page**, for instance creating a link on Page A to Page C, which must still be created in the wiki;
- Creating a link from a page in the wiki to another website, which we call an **external link**, for instance linking Page A to the home page of your organisation.
- Deciding which words, letters or concepts you would like to display to the user as the hyperlink text. That is the text which appears as a blue link in the browser. For instance you may want to display your full name as a link to your User Page, which uses an abbreviated form of your name. The link "Mary Brown" may go to a User page called "sparrow", which is Mary's User name. In Mediawiki language we refer to this technique as a **piped link** because the syntax uses the character "|" often referred to as the pipe. This feature can be very useful to the user as it can display a more meaningful link name for an otherwise complex page address.

Creating New Pages

To create a page, first think about where you might want your page to be linked from. Say you want to create a page for your new Chemistry course. Ideally, there should be a link to this course from a page listing all the science courses. You would go edit the science course page to add a link to your new Chemistry page — even though your page hasn't been made yet. Once you save your changes and click on the new link, you'll be given the opportunity to create the page.

In this first method you are creating a hyperlink in a page to another page that *does not yet exist* in the wiki. This can be a difficult concept to grasp at the start, but once you see how it works it should become perfectly clear.

Creating a link in your content is an easy process that can be done either by using a simple wiki syntax or through the editing toolbar that appears while in the Editing mode.

It is possible to create a page before you make a link to it. **Simply type the name of the desired page onto the end of the http://www.wikieducator.org/ url, like this http://www.wikieducator.org/Coffee** and hit enter. This will take you to a page called Coffee and prompt you with the option of creating the Coffee page.
www.wikieducator.org/Savitha Harish/English Totorials name **(www.wikieducator.org/User:XXXX/nameofpagedesired).}}**

Linking to a Userpage

You may wish to create a new page with a link back to your userpage. In that case, please follow this format: www.wikieducator.org slash Username slash name of page desired (www.wikieducator.org/User:XXXX/nameofpagedesired).

- **Remember: because you made the page without first making a link to it, it might get lost in the sea of pages.**

Linking is very important for this reason: If you don't link your new page from an existing page, then no one will be able to find it. Spend some time thinking about good places where you should make a link to your new page. Using the search box is very useful for finding phrases and material where you might want to provide a link.

Using the Wiki Syntax for internal links

To create a link to an existing page in the WikiEducator, surround the word you wish to use as your link in double square brackets like this:

[[Learning4Content]]

This will create a link when your content is saved (or previewed) like this:

Learning4Content

Tip: Remember page links are case sensitive

- Newbies often make the mistake of using capitals and lowercase letters inconsistently when referring to the same page. So you may end up creating a new page when intending to link to an existing page because the case (upper and lower case) configuration do not match.
- Open the page you want to link to in a new window. The name which should appear between the double square brackets is everything which appears after the http://wikieducator.org/, for example http://wikieducator.org/**Learning4Content**

Editing Toolbar method

Highlight the word or set of words you would like to be the name of your new page and click on the *Internal Link*  button in the GUI toolbar.

You can use the Editing toolbar to perform a lot of simple formatting on the wiki, including creating links to pages.

When you preview or save your content, you will see that the text you have now linked has changed colour. If this link points towards a page that does not yet exist in the wiki, the link will be red. If the page already exists the link will be blue. The wiki software automatically checks all links to see whether they already exist in the wiki or not.

Creating a link to a page that does not yet exist is the first step to creating a new page.

Activity

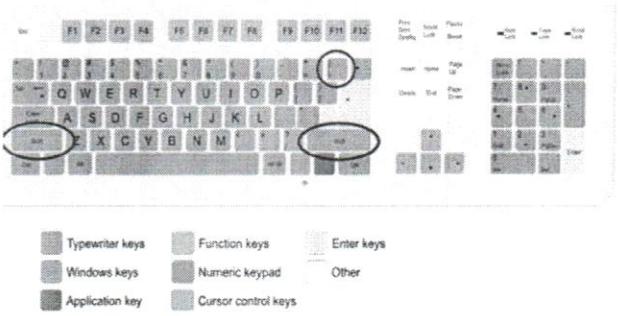
You've probably already created your first page if you've made a sandbox under your User page. Have a go at creating maybe a booklist page of some of your recent reads.

Step 1: Go to your user page.

Step 2: Create a name for your new page e.g. [[/My Booklist/]].
Step 3: Use the wiki syntax above to turn the text you have entered into a page link.

Piped Links

There will often be times when you want the displayed text of a link to be different than the actual name of the page you are linking to. You may, for example, want to create a link that displays to the user as "Next Page" but the page itself will be called "ProjectPage2" or "ProjectPage3". If you want the displayed text of the link to have a different title than the actual page name you can do so by adding the pipe "|" divider (SHIFT + BACKSLASH on English-layout and other keyboards).



The pipe "|" is then followed by the alternative name. For example:

[[Name of the Target page|display text]]

Using this type of syntax you can create a link to say the eXe Manual with a different link text like this:

[[Online_manual|The eXe User Manual]]

which will appear like this: The eXe User Manual

Summary

To get an

- **internal link** which displays a a different name you should write [[todo|My to do list]]

The first part (before the "|") is the name of the actual page in WikiEducator and should be the exact URL address displayed after the http://www.wikieducator.org part. By way of example:

[[Help:Contents|Help on WE]] will link you to http://wikieducator.org/Help:Contents so you have to omit http://wikieducator.org/ in the link. [http://wikieducator.org/Help:Contents] will appear as an external link like a reference [1].

External links

http://www.exe.learning.org

There are a few ways to create links to external web sites in the wiki. You may simply type in the full URL for the URL page you wish to link to: http://www.exelearning.org

The wiki will automatically treat this text as a link (as has been done with the URL above) and will display the raw web address, including the "http://" part. It is recommended that

you don't use this format much, as raw URLs are ugly and often give no clue to what the site actually is.

The best type of link for most situations includes a description after the address. This description appears as the title of the link e.g. eXe Web Site. To create a link like this just type a link and the description, separated by a space and enclosed in single square brackets: [http://www.exelearning.org eXe Web Site]

This will create a link to the eXe web site that appears like this: eXe Web Site
Enclosing the link in single square brackets without providing a description...
[http://www.exelearning.org]
...will display the link as a number in brackets, like this: [1]. This format is mostly used for citing sources within an article. It looks like a footnote, so it's best to use it only as such (for example, following a direct quote or a statement which requires a source).

Activity

Have a go at entering links on your user page sandbox.
Step 1: Click on the link to your user page (remember it's located in the top right of the screen) and open your sandbox page.
Step 2: Use the syntax descriptions above to add external links to your organisation's home page or your favourite blog into your sandbox.

Interwiki links

nterwiki links are external links that behave like internal links. Essentially, they are shortcuts to other mediawiki projects. For example the link to the wikipedia main page could be written using the external link notation [http://en.wikipedia.org/Main_Page wikipedia] which results in this link to wikipedia or using the interwiki link notation [[w:Main Page|wikipedia]] which results in this link to wikipedia. The interwiki link method is shorter and more convenient once you are familiar with the notation.

Key Point

Add a **prefix** to the internal link notation to create an **interwiki** link. The prefix for wikipedia is **wikipedia** or **w** as shown below:

[[w:Main Page|wikipedia]]

The following table gives examples of the interwiki prefixes that are available on WikiEducator:

prefix	destination URL	usage example	interwiki link example
commons	http://commons.wikimedia.org/wiki/	[[commons:MediaWiki]]	commons:MediaWiki
mediazilla	http://bugzilla.wikimedia.org/	[[mediazilla:1209]]	mediazilla:1209
wikibooks	http://en.wikibooks.org/wiki/	[[wikibooks:Main Page]]	wikibooks:Main Page
wikimedia	http://wikimediafoundation.org/wiki/	[[wikimedia:Main Page]]	wikimedia:Main Page
wikinews	http://en.wikinews.org/wiki/	[[wikinews:Main Page]]	wikinews:Main Page

wikiquote	http://en.wikiquote.org/wiki/	[[wikiquote:Main Page]]	wikiquote:Main Page
wikisource	http://en.wikisource.org/wiki/	[[wikisource:Main Page]]	wikisource:Main Page
wikispecies	http://species.wikimedia.org/wiki/	[[wikispecies:Main Page]]	wikispecies:Main Page
wiktionary	http://en.wiktionary.org/wiki/	[[wiktionary:Main Page]] or [[wikt:Main Page]]	wiktionary:Main Page or wikt:Main Page
wikipedia	http://en.wikipedia.org/wiki/	[[wikipedia:Main Page]] or [[w:Main Page]]	wikipedia:Main Page or w:Main Page

Activity

Have a go at entering interwiki links on your user page sandbox.

Step 1: Click on the link to your user page (remember it's located in the top right of the screen) and open your sandbox page (For example My sandbox).

[▼]

Step 2: Use the syntax descriptions above to add interwiki links to your favourite mediawiki project into your sandbo

Images and Media

In this tutorial, we will look at how you can insert images and other media into a page on the wiki.

There will be times when you may want to illustrate something with that picture that is worth a thousand words or, in this day and age, perhaps that podcast of your interview with a famous scientist. Adding images and other media into the wiki is a great way to enrich your pages and create a compelling learning experience.

Inserting most media into the wiki is a two-step process that involves inserting the syntax to tell the wiki where the media should go on the page, and then uploading the media itself into the wiki. (For example uploading an image from your desktop onto the WikiEducator server - don't worry, this is easy to do.)

We will mainly focus on adding images to your content but the same principles apply to all media you may want to add to the wiki. More sophisticated media types like sound and movies will be covered in the intermediate Tutorials for WikiEducator.

Currently WikiEducator supports adding the following types of media:

- Images - these can be .gif, .jpg, .png, or .svg formats;
- Links to specific file types, currently .pdf, mp3 files and .elp (eXe files)

Other media types will be covered in the intermediate tutorials so you don't need to worry about these for now:

- Sound - should be .mp3 files
- Movies - .flv (flash video)
- Flash - .swf (flash objects)

In the following pages we will work through the process of adding an image and give you opportunities to try it out for yourself on your User page. (You do have a User page by now don't you? If you don't, see: Creating an Account).

Basic syntax

The most basic syntax for adding an image is: [[Image:IMG_0057.jpg]]

You insert this where you would like the image to appear. --~~~~Insert non-formatted text here#REDIRECT [[[Insert text]]] **Explanatory notes**

1. The syntax is contained within two square brackets;
2. For images, type the word "Image" followed by a colon (:);
3. You must substitute the word "*Name_of_Picture_goes_here.jpg*", with the name of the file and its extension (the letters which appear after the full stop. The extensions for the image formats you can use are: .gif, .jpg, .png. and .svg). For example, if you wanted to insert a jpeg image on your computer called "Flowers_Sept06", you would type the following: [[Image:Flowers_Sept06.jpg]].

Tip: There are a couple of things that are important to remember about adding images to the wiki. The first is that image names are case-sensitive. For example, if an image is called Picture.jpg then neither picture.jpg nor Picture.JPG will find it. Secondly, the only type of images that are usable on the wiki are images that end with either a .jpg, .gif, .png, or.svg extension. You must always include this extension in the filename, otherwise the wiki software will not know what file type you intend to upload.

With images, you can:

1. use an image that is already available on WikiEducator (in other words, an image that was previously uploaded onto the WikiEducator server), or
2. Upload an image from your personal computer onto the server.

For further information on wikieducator hit the link- http://wikieducator.org/Wikieducator_tutorial#Tutorial_1_-_What_is_a_wiki.3F

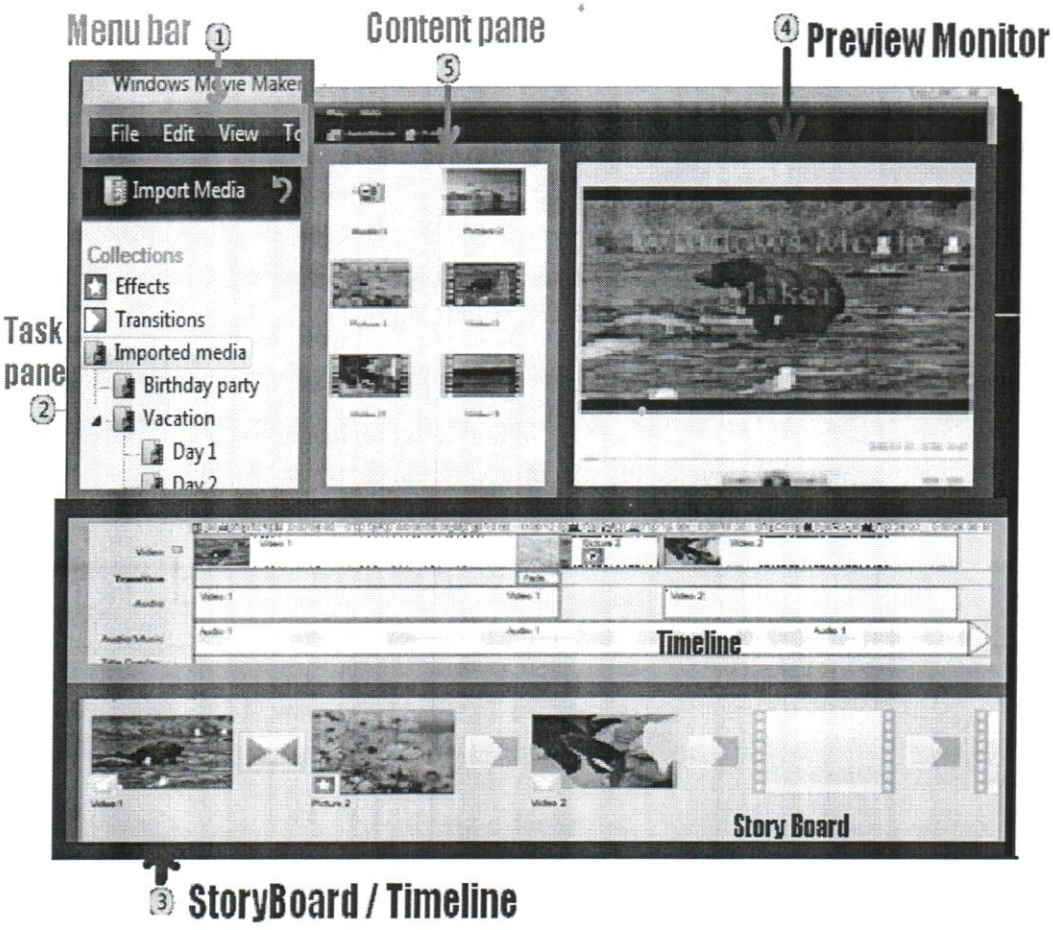
8 Movie making with Windows Movie Maker

Mr. Ajay Gaude
General Manager,
Goa Industrial Development Corporation, Goa

Windows Movie Maker is a feature of Windows Vista that enables you to create home movies and slide shows on your computer, complete with professional-looking titles, transitions, effects, music, and even narration. And when you're ready, you can use Windows Movie Maker to publish your movie and share it with your friends and family.

Understanding the Windows Movie Maker tools

Windows Movie Maker is divided into three main areas: the panes, the storyboard/timeline, and the preview monitor.



The Tasks pane lists the common tasks that you may need to perform when making a movie, including importing files, editing, and publishing your movie.

The Collections pane displays your collection folders, which contain clips. The collection folders appear in the Collections pane on the left, and the clips in the selected collection folder are displayed in the Contents pane on the right. The following picture shows the Collections pane:

The Contents pane shows clips, effects, or transitions you're working with while you create your movie, depending on the view you're working with. You can change the view to show thumbnails or details. You can drag clips, transitions, or effects from the Contents pane or a collection from the Collections pane to the storyboard/timeline for your current project. You can also drag clips to the preview monitor to play them. If you make changes to a clip, those changes are only reflected in the current project; they do not affect the source file.

The area where you create and edit your project is displayed in two views, the storyboard and the timeline. You can switch between these two views when making a movie.

Storyboard. The storyboard is the default view in Windows Movie Maker. You can use the storyboard to look at the sequence or ordering of the clips in your project and easily rearrange them, if necessary. This view also lets you see any video effects or video transitions that have been added. Audio clips that you have added to a project are not displayed on the storyboard, but you can see them in the timeline view.

Timeline. The timeline view provides a more detailed view of your movie project and allows you to make finer edits. Using the timeline view you can trim video clips, adjust the duration of transitions between clips, and view the audio track. You can use the timeline to review or modify the timing of clips in your project. Use the timeline buttons to switch to storyboard view, zoom in or out on details of your project, narrate the timeline, or adjust the audio levels.

The preview monitor enables you to view individual clips or an entire project. By using the preview monitor, you can preview your project before publishing it as a movie. You can use the buttons underneath the preview monitor to play or pause a clip, or to advance or rewind a clip frame-by-frame. **The Split button** allows you to split a clip into two parts at the point displayed in the preview monitor. You can make the preview monitor larger or smaller by clicking View, pointing to Preview Monitor Size, and choosing a size. You can also drag the window to make it larger or smaller.

Import video from a videotape

Video files can be copied from a videotape in a digital video (DV) camera to your computer by using Import Video. When you import video from a videotape in a DV camera to your computer, the video on the tape is encoded into a video file and saved to your computer's hard disk.

You can also open Import Video using Windows Movie Maker. With the DV camera connected to your computer and turned on in playback mode, in Windows Movie Maker, on the File menu, click Import from Digital Video Camera.

You can also open Import Video using Windows Photo Gallery. With the DV camera connected to your computer and turned on in playback mode, in Windows Photo Gallery, click File, click Import from Camera or Scanner, click your DV camera in the list of devices, and then click Import.

Video cannot be imported from an analog video camera or VCR when using Import Video or Windows Movie Maker. To import video from an analog video camera or VCR, you need to have an analog video capture device installed on your computer, and then use software that enables you to import video from an analog capture device. For more information, check the documentation that came with your analog capture device or go to the manufacturer's website.

- To import the entire video from a tape in a digital video (DV) camera
- To import the entire video from a tape in a digital video (DV) camera and then burn it to a DVD

- To import parts of video from a tape in a digital video (DV) camera

Import video files, pictures, and audio into Windows Movie Maker

You can import files with the following file name extensions into Windows Movie Maker to use in your project:

- Video files: .asf, .avi, .dvr-ms, .m1v, .mp2, .mp2v, .mpe, .mpeg, .mpg, .mpv2, .wm, and .wmv
- Audio files: .aif, .aifc, .aiff .asf, .au, .mp2, .mp3, .mpa, .snd, .wav, and .wma
- Picture files: .bmp, .dib, .emf, .gif, .jfif, .jpe, .jpeg, .jpg, .png, .tif, .tiff, and .wmf

You can also import files into Windows Movie Maker that have a different extension from the ones listed above, but not all file types will work when you try to use them to make a movie. To import files into Windows Movie Maker

- Click File, and then click Import Media Items.
- Navigate to the location that contains the digital media files you want to import, and then click Import.

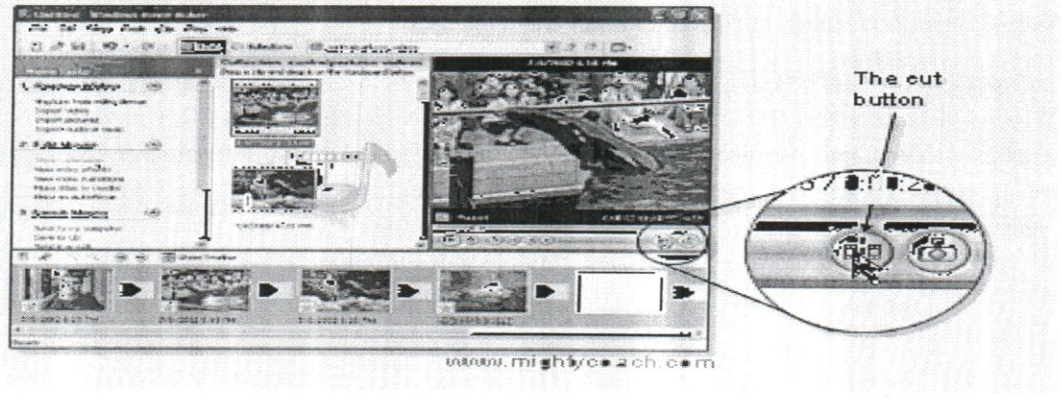
Work with clips in Windows Movie Maker

After you've imported files into Windows Movie Maker, you're ready to start the main part of moviemaking—editing. Using Windows Movie Maker, you can edit clips in a variety of different ways. You can split a long clip into two shorter clips, combine two clips into a single clip, trim the beginning or ending of a clip, and even create new clips.

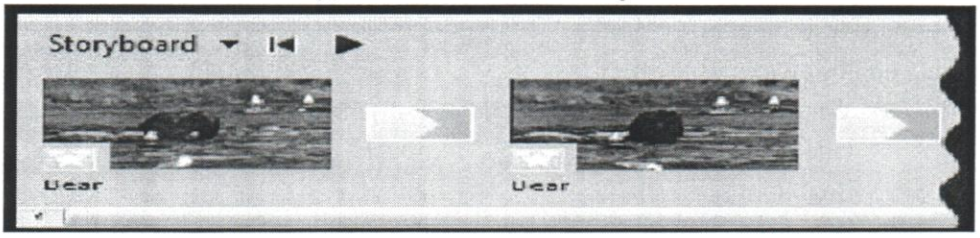
Split and combine clips

You can manually split video and audio clips into smaller clips to make your clips easier to work with. For example, if you have a video clip that has two different scenes, you might want to split the video clip at the point where the one scene ends and the other begins, and then insert a transition between the two clips. You can drag the playback indicator on the seek bar to the exact spot where you want to split the clip. Here is another step by step process **To split a clip.**

- In the Contents pane or on the storyboard/timeline, click the video or audio clip that you want to split.
- Under the preview monitor, click the Play button Picture of the Play button in Windows Movie Maker.
- When the clip reaches a point near the place you want to split the clip, click Pause.
- Under the preview monitor, use the playback controls to find the point where you want to split the clip.
- Under the preview monitor, click the Split button.



Conversely, you might have a file that was divided into smaller clips that you want to combine. However, you can only combine contiguous clips. "Contiguous" means that the start time of the second clip immediately follows the end time of the first clip. It means You can combine more than two clips at a time as long as they are consecutive. To select multiple clips, click the first clip, press and hold down the SHIFT key, and then click the last clip.

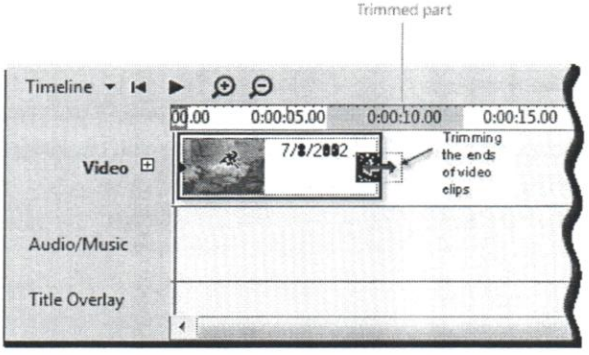


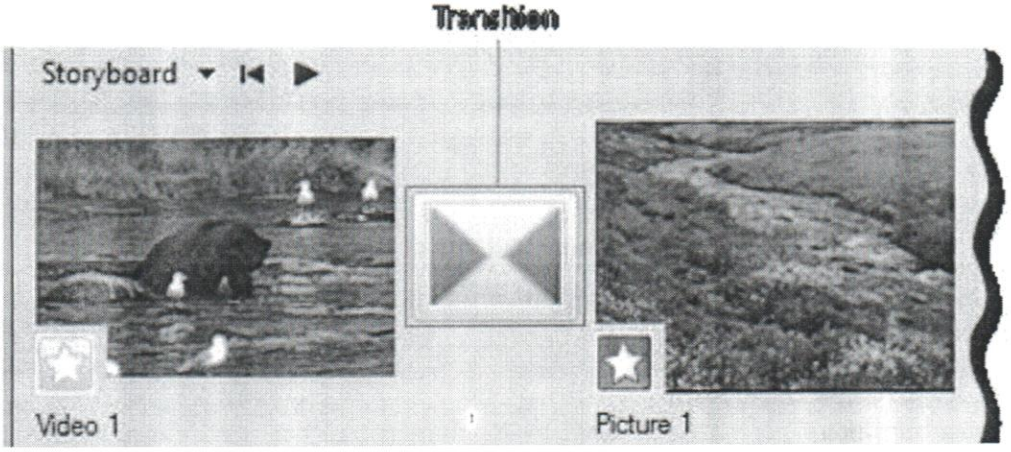
Here is another step by step process **To combine clips**

- In the Contents pane or on the storyboard, hold down the CTRL key, and then click the contiguous clips you want to combine.
- Click Clip, and then click Combine : The name and property information of the first clip in the group is used for the new clip and the time is adjusted accordingly.

Trim (hide) parts of a video clip

When you trim a clip, you make a new start and/or end trim point. The start trim point determines when the clip will begin to play, and the end trim point determines when the clip will stop playing in your project and final movie. When you trim a clip, the trimmed part of the clip is not actually removed from the source file; it's just hidden so the trimmed part doesn't appear in your project or published movie.





Drag the trim handles on a clip to set the start and end trim points. Trim handles appear as small black triangles at the beginning and end of a clip after you click the clip on the timeline. When you hold your pointer over a trim handle, the pointer changes to a red double-headed arrow. Drag a trim

handle to set the new start or end point of the clip. Here is another step by step process **To trim a video clip**

- If you are in the storyboard view, click View, and then click Timeline.
- On the timeline, click the clip that you want to trim.
- Use the playback controls under the preview monitor to find the point where you want to trim the clip.
- Do the following:
  - When the playback indicator is at the point where you want the selected video or audio clip to start playing back, click Clip, and then click Trim Beginning.
  - When the playback indicator is at the point where you want the selected video or audio clip to stop playing back, click Clip, and then click Trim End.

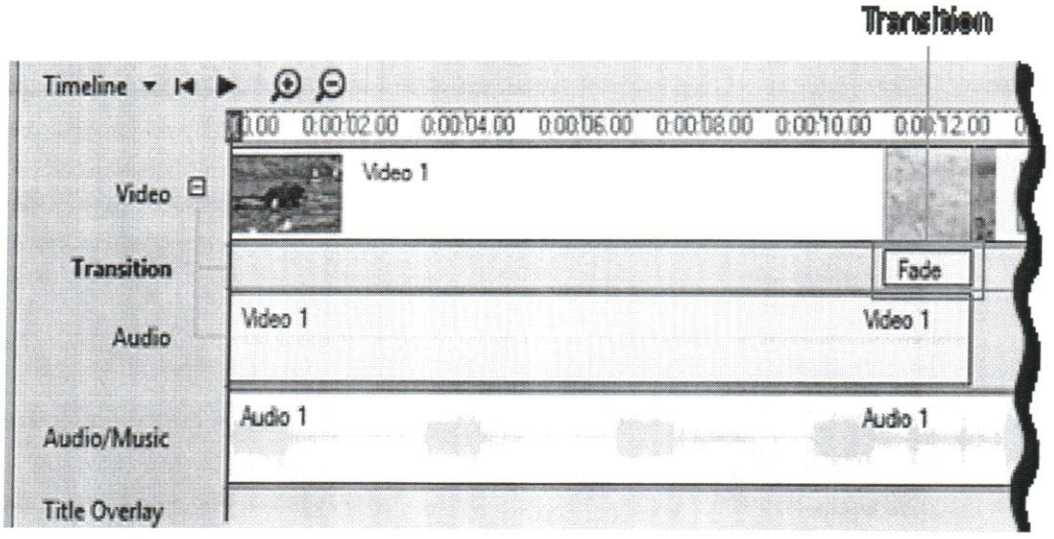
Add transitions and effects to pictures and video

You can improve your moviemaking by adding your own special touches to make your movies look distinctive and professional. By adding transitions and effects,

Transitions

A transition controls how your movie plays from one video clip or picture to the next. You can add a transition between two pictures, video clips, or titles in any combination on the storyboard / timeline. You might choose to use a popular and great - looking transition like a Fade. Or you might choose to use more brash transitions, such as, Bars, Shatter, or Zig Zag (to name just a few).

Add a transition by dragging it to the timeline and dropping it between two clips on the Video track. Or, if you are in the storyboard view, you can drag the transition to the transition cell between two video clips or pictures. Any transitions that you add appear on the Transition track of the timeline. To see this track, you must expand the Video track.



To add a transition

1. On the storyboard/timeline, click the second of the two video clips, titles, or pictures that you want to add a transition between.
2. Click Tools, and then click Transitions.

3. In the Contents pane, click the transition that you want to add. You can click Play under the monitor to see a preview of what the transition looks like.
4. Click Clip, and then click Add to Timeline or Add to Storyboard.

To change the transition duration

The amount of overlap between two clips determines the transition duration. At times, you might want to make the transition shorter or longer.

1. To view the Transition track of the timeline, expand the Video track.
2. On the Transition track of the timeline, do one of the following:
   - ❖ To reduce the transition duration, drag the beginning of the transition towards the end of the timeline.
   - ❖ To increase the transition duration, drag the beginning of the transition towards the beginning of the timeline.

To change the default transition duration

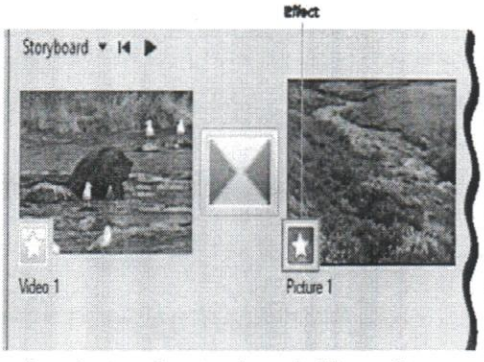
1. Click Tools, click Options, and then click the Advanced tab.
2. Type the time (in seconds) that you want transitions to play back by default after the transitions are added to the storyboard/timeline.

To remove a transition

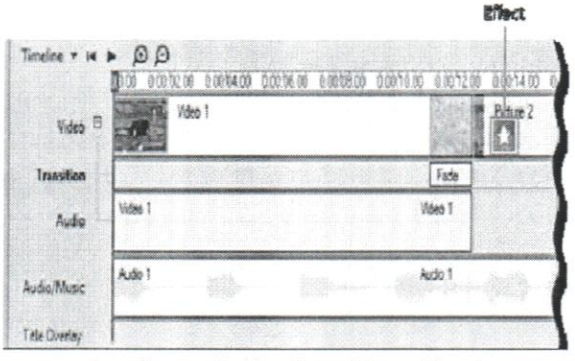
1. Do one of the following:
   - ❖ On the storyboard, click the transition cell that contains the transition that you want to remove.
   - ❖ On the timeline, click the transition on the Transition track that you want to remove.
2. Click Edit, and then click Remove.

Effects:

Effects enable you to add special effects to your movie. For example, you might have an imported video that you want to look and feel like a classic, old-time movie. If so, you could add one of the Film Age effects to a video clip, picture, or title to make the video for that clip look like an old-time movie.



A project on the storyboard with an effect



A project on the timeline with an effect

Add an effect

You can add an effect by dragging the effect from the Contents pane and dropping it on a picture or video clip on the Video track of the timeline, to the effect cell of a video clip, or to a picture on the storyboard. The thumbnail view in the Contents pane displays examples of the different effects.

Step by step process to add an effect

1. On the storyboard/timeline, select the video clip, picture, or title to which you want to add the effect.
2. Click Tools, and then click Effects.
3. In the Contents pane, click the effect you want to add. You can click Play under the preview monitor to see a preview of what the effect looks like.
4. Click Clip, and then click Add to Timeline or Add to Storyboard. effects that you had previously downloaded and installed will not be available in the current version of Windows Movie Maker.

Change an effect:

If you add multiple effects, you can change the order in which they are displayed by using the Move Up or Move Down buttons. To quickly add an effect, you can drag an effect to a video clip, picture, or title on the storyboard/timeline. If you add the same effect more than once to a clip, the effect is applied as many times as you added it. For example, if you add the Speed Up, Double effect two times to the same video clip, the clip would play four times as fast as the original clip. You can also remove an effect by selecting the effect cell in the storyboard that contains the effect you want to remove, and then pressing the DELETE key.

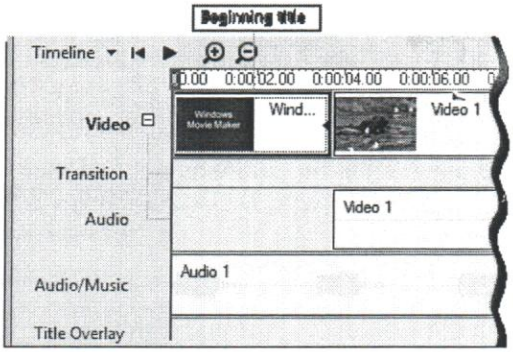
Step by step process to change an effect

1. On the Video track of the timeline or on the storyboard, click the video clip, picture, or title that has the applied effect you want to change.
2. Click Clip, point to Video, and then click Effects.
3. Do one of the following:
   - ❖ To remove an effect, in the Displayed effects area, click the effect, and then click Remove. Repeat as necessary.
   - ❖ To add an effect, in the Available effects area, click the effect you want to add, and then click Add. Repeat as necessary.

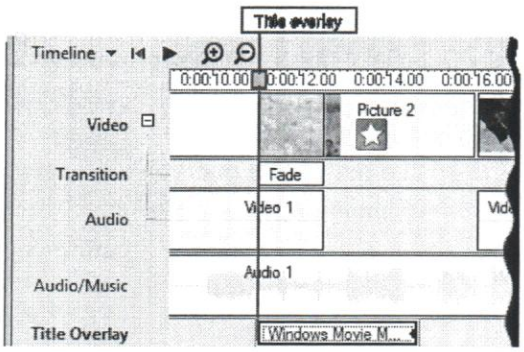
Add movie titles and credits

You can also add movie titles and credits, your name, the date, credits, and other text to various places in your movie: at the beginning or end, before or after a clip, or overlaying a clip. The title plays for the specified amount of time, either on the screen by itself or overlaying the video as it plays, and then the title disappears and the video clip or picture continues.

Title on the timeline

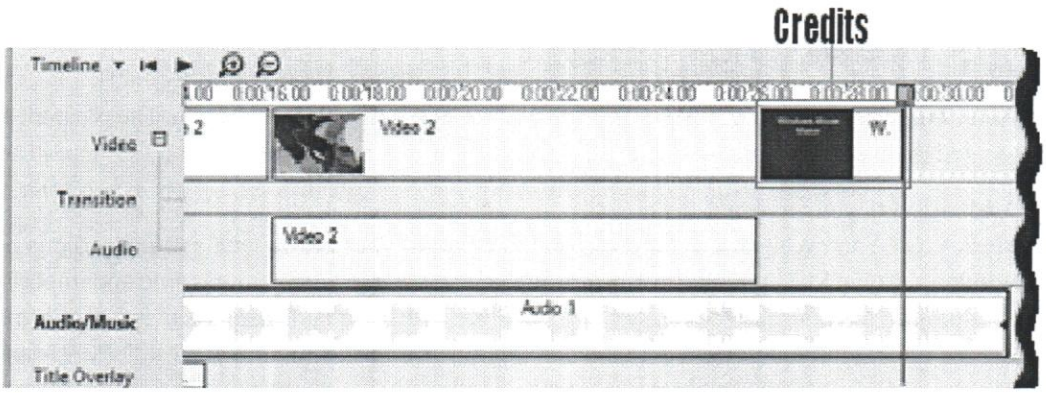


A project with a title that appears before a video clip



A project with a title that overlays a video clip as the clip plays

Credits on the timeline



The following picture shows a project with credits that appear at the end of the project

To add a title or credit

1. If you know where you want the title or credit to appear in your movie, click that location on the storyboard/timeline.
2. Click Tools, and then click Titles and Credits.
3. Click the link that corresponds to where you want to add the title or credit.
4. In the Enter text for title box, type the text that you want to appear as the title or credit.

After you type the text, the monitor displays the default animation and format for the title or credit you want to add.

5. To change the title animation, click Change the title animation, and select a title animation from the list.
6. To change the font and color for your title, click Change the text font and color, and then choose the font, font color, formatting, background color, transparency, font size, and position of the title to your liking.
7. Click Add Title.

To edit an existing title

1. On the storyboard/timeline, click the title you want to edit.

2. Click Edit, and then click Edit Title.
3. Make the changes you want to make, and then click Add Title.

To change the title duration

1. To make sure that you are in timeline view, click the View menu, and then click Timeline.
2. Select the title whose duration you want to change.
3. Do one of the following:
   - ❖ To extend the playback duration of the title, drag the end trim handle toward the end of the timeline.
   - ❖ To reduce the playback duration of the title, drag the end trim handle toward the beginning of the timeline.

To remove a title

1. On the storyboard/timeline, click the title that you want to remove from your movie.
2. Click Edit, and then click Remove.

Note: Trim handles appear as black triangles at the beginning and end of a clip. The pointer changes to a red double-headed arrow when you hold it over a trim handle.

Add music to your movie

Music can be an excellent way to establish the mood of your movie, and adding music is easy in Windows Movie Maker. First, find the music that you want to add to your movie and import it into your project. Second, add the music to the timeline on the Audio/Music track and edit it to create just the effect that you want. You can add both music and narration to the Audio/Music track in Windows Movie Maker. Both can play at the same time in your published movie.

You can then adjust the audio levels to determine which audio will play louder than the other in your movie. A quick way to adjust the volume of an audio clip on the Audio/Music track is to right-click the clip, and then clicks Volume. Adjust the volume with the slider. Here is processes **to add or import music files:**

1. Click File, and then click Import Media Items.
2. Browse to the file that you want to add, and then click the file. You can import audio files with the following file name extensions into Windows Movie Maker: .aif, .aifc, .aiff .asf, .au, .mp2, .mp3, .mpa, .snd, .wav, and .wma.
3. Click Import.
4. Drag the music file to the Audio/Music track of the timeline.
5. Use the preview monitor to preview the accompanying video, and then drag the audio track to the right or left to better synchronize the audio and video, if needed. The pointer turns into a hand when you click the audio file, indicating that you can move it.

To adjust the audio levels of music and audio

1. Click Tools, and then click Audio Levels.
2. Do one of the following:
   - To increase the level of audio on the Audio track that is part of a video clip, drag the slider toward Audio from video.

- To increase the level of audio that is on the Audio/Music track, drag the slider toward Audio/Music.

3. Click Close.

To mute audio in a video clip, do the following:

1. On the Audio or Audio/Music track of the timeline, click the audio clip that you want to mute. To select multiple clips, press and hold down the CTRL key as you click clips.
2. Click Clip, point to Audio, and then click Mute.

To adjust the volume of audio in movie

Adjust the volume of each audio clip individually by doing the following:

1. On the Audio or Audio/Music track of the timeline, select the audio clip whose volume you want to adjust.
2. Click Clip, point to Audio, and then click Volume.
    - To adjust the volume, do one of the following:
    - To reduce the volume, slide the Audio volume level slider to the left.
    - To increase the volume, slide the Audio volume level slider to the right.
    - To mute the clip, select the Mute clip check box.
    - To reset the volume to the original volume, click Reset.

To fade audio in or out?

You can fade audio in or out by adding a Fade In or Fade Out audio effect. To fade audio in or out, do the following:

1. On the Audio or Audio/Music track of the timeline, select the audio clip.
2. Click Clip, point to Audio, and then click Fade In or Fade Out.

Add narration to your movie

You can make your movie more personal by describing in your own words what happens in your movie. The following steps describe how to add narration to your movie. Windows Movie Maker automatically imports your narration into the current collection and puts it on the timeline at the point on the Audio/Music track where you first began to narrate. If you want Windows Movie Maker to automatically stop recording when you reach another audio track on your timeline, select the Limit narration to available free space on Audio/Music track check box before you begin recording your narration.

Windows Movie Maker saves the file with a .wma (Windows Media Audio) file name extension to the folder you choose. Here is step by step process

1. If the Storyboard view is visible, click View, and then click Timeline.
2. Move the playback indicator, which appears as a square with a vertical line below it, to a point on the timeline where the Audio/Music track is empty, and where you want to begin your narration.
3. Click Tools, and then click Narrate Timeline.
4. If Show options is visible, click it.
5. To prevent any audio from playing over your speakers while you record your narration, select the Mute speakers check box. This helps to keep unwanted audio or echoes out of your narration.

6. Under Audio device, click the audio capture device that you want to use. This option is available only for analog devices, and the audio device will usually be the name of the sound card that is installed on your computer.
7. To adjust the recording level of your narration, speak into your recording device and move the Input level slider to a place on the meter that registers your voice at the volume you want. You'll probably want the slider toward the upper part of the meter, but below the red-colored area.
8. Click Start Narration and begin to narrate the contents of the timeline.
9. When you finish your narration, click Stop Narration.
10. In the File name box, type a file name for your narration, and then click Save.
11. Click Close.

Preview video in Windows Movie Maker

You can preview whole projects or smaller components such as audio or video clips, transitions, and effects in Windows Movie Maker. Periodically previewing a project in the monitor as you work on it is useful to see how it looks and sounds and to check your editing. Or, to ensure that you have imported the content that you want to use in your movie or to change individual clips, you can view or listen to an individual video or audio clip. You can also preview video effects and transitions to see what they look like before you add them to your project. To do this, click an effect or transition in the Contents pane, and then click Play under the preview monitor.

To preview a project

1. Add one or more clips to the storyboard/timeline.
2. Click the Play menu, and then the click Rewind Storyboard or Rewind Timeline, depending on the view that you are using. This ensures that the preview will start at the beginning of your project.
3. Under the preview monitor, click the Play button.

To preview a clip

1. In the Contents pane, click the audio or video clip that you want to preview.
2. Under the preview monitor, click the Play button.

To pause previewing a project

1. When video, audio, a video effect, or a video transition is playing in the preview monitor, under the preview monitor, click Pause.

To play video in full-screen mode

1. Click a video clip on the storyboard/timeline or in the Contents pane to select it.
2. Click View, and then click Full Screen.

Note: To exit full screen and continue previewing video in the preview monitor, press ESC.

To change the preview monitor size

1. Click a video clip on the storyboard/timeline or in the Contents pane to select it.
2. Click View, point to Preview Monitor Size, and then click Small or Large.

Note: To make the preview monitor larger or smaller, you can also click and drag the line between the preview monitor and the collections window to the left or to the right.

To jump to a frame

1. When video is either playing or paused in the preview monitor, click the Previous Frame or Next Frame buttons under the preview monitor.

To jump to a clip in a project

1. Click a clip on the storyboard/timeline to select it.

2. Click the Play menu, and then click Back or Forward.

Publish a movie in Windows Movie Maker

When you finish working on a project, you can publish the project as a movie. A movie is a Windows Media file with a .wmv file name extension or an Audio-Video Interleaved (AVI) file with an .avi file name extension.

To publish a movie to your computer

- Click File, click Publish Movie.
- Click This computer, and then click Next.
- In the File name box, type a name for your movie.
- In the Publish to box, choose where you want to save your movie once it's published, and then click Next.
- Choose the settings you want to use to publish your movie, and then click Publish.
- If you want to watch your movie after it has been published, select the Play movie when I click Finish check box.
- Click Finish.

To avoid including the title, author, copyright, rating, and comments information in the published movie file: You can choose not to include information such as the title, author, copyright, rating, and comments in your published movie files. If you not to include this information, your name and other metadata information is not displayed when you or someone else plays back your movie in a media player

- Click Tools, and then click Options.
- Click the General tab, and then select or clear they Do not include the title, author, copyright, rating, and comments information in the published movie file check box, depending on whether you want personally identifiable information to be removed with the published movie file.

9 Multimedia Resources

Dr. Sanjay Kumar Pandagale
Associate Professor in Education,
Regional Institute of Education, NCERT, Shyamla Hills, Bhopal-462013
http://wikieducator.org/User:Psanjaykumar
https://www.facebook.com/psanjaykumar
Email- sanjaypandagale@gmail.com
+91-9826296282

As a 21st century teacher, you have the opportunity to engage your students like never before. Multimedia resources, such as interactive image, audio, video, online games, animation and data sets, allow you to address a range of learning styles and meet the needs of every student. Whether you're showing video to the entire class or overseeing individual online interaction, multimedia resources can provide a gateway to a whole new level of learning for you and your students.

Multimedia Resources offer

Portability—with multimedia, learning can happen anytime, anywhere. Students can listen to a podcast or view a vodcast at home, in the car or on a field trip. These tools are great ways to reinforce concepts and enable students to learn in context. Imagine, for example, learning about the night sky while listening to an astronomy podcast. As busy teachers you can access professional development with podcasts, podcasts and online.

Flexibility—Today's resources let you demonstrate concepts and lessons in ways that textbooks and classroom lectures alone can't. Teaching about DNA? With multimedia, you can have students research DNA online, bring world-renowned scientists into your classroom with podcast lectures, show a 3D computer model of a DNA strand and then have students design their own strand.

Individualized Learning—Multimedia resources can help you meet the needs of many different types of learners Visual learners can watch an online video, while auditory learners listen to streaming audio and hands-on learners play an interactive game. Students who need extra practice can use these tools again and again.

Collaboration and Community Building—Blogs, social networking sites and wikis allow students to interact with and teach each other, not only within their own school, but also with learners across the country and the world as well.

A Broader View of the World—Multimedia resources can help your students experience today's global community. With multimedia, students can learn about new cultures and countries in immediate and authentic ways – and prepare to interact with that broader community in an increasingly collaborative global job market

Text

It may be an easy content type to forget when considering multimedia systems, but text content is by far the most common media type in computing applications. Most multimedia systems use a combination of text and other media to deliver functionality. Text in multimedia systems can express specific information, or it can act as reinforcement for information contained in other media items. This is a common practice in applications with accessibility requirements. For example, when Web pages include image elements, they

can also include a short amount of text for the user's browser to include as an alternative, in case the digital image item is not available.

Images:-

The use of images in teaching and learning has benefits to support student comprehension, retention, and application. For example, we relate the use of images to spatial intelligence, student motivation to learn, and conditions of instruction, which are established models and theories in education.

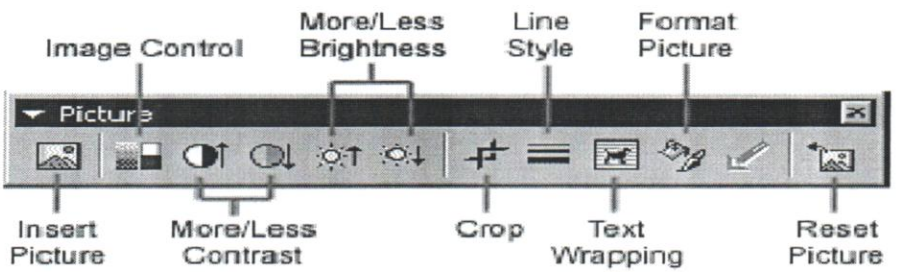
Ideas for Using Digital Images in Courses

- Documenting class activities for journals and portfolios
- Creating tutorials using photographs and screen captures
    - Screen capture: full screen (print screen key); active window (alt-print screen key)
    - Specialized software: SnagIt
- Using images in concept maps (Inspiration, Map):sample concept map
- Student produced web projects: sample project
- Panoramas and Dioramas.
- Digital Storytelling using free Microsoft Photo Story (tutorial).

It is important to remember that pictures that are taken for your course may require permission for use: UNF talent release form.

Editing a Graphic in MS Office

Select the image you wish to edit by clicking on it once with the mouse (you will see small boxes appear around the selected graphic). You can click and drag these boxes to resize the image. Hold the shift key while dragging to maintain the proportions of the image. Other picture effects and basic editing can be changed using the Picture toolbar. The Picture toolbar should appear when you click on the image. If the toolbar is not present, right-click on the picture and select "show picture toolbar, or select **View|Toolbars|Picture** from the menu at the top of the page.



- **Insert Picture**: will allow you to browse to select an image to insert.
- **Image Control**: change to grayscale, black and white, or a watermark.
- **Contrast** (*More/Less*): adjusts the contrast between the colors of the image.
- **Brightness** (*More/Less*): darken or brighten the image.
- **Crop**: drag the edge boxes on the image to delete outer portions.
- **Line Style**: change or add a border to the graphic.
- **Text wrapping**: adjust how the document wraps the text around the graphic.
- **Format Picture**: display the image properties.

- **Reset Picture:** deletes any modifications made to the image.

How to find 'free-to-use' images for educational purposes

Nowadays it is easy to find images online. However, many online images have copyright implications. Here is a list of sites (in alphabetical order) where you can find images that you can freely use for educational purposes.

Note: although many images on these sites are free to use, normally you need to credit the creator in the way they specify.

- **Creative Commons** – it has a search page where you can choose which site you want to find 'free-to-use' images from
- **Everystockphoto** – searches across several 'free-to-use' image.
- **Flickr – The Commons** – large number 'free-to-use' images submitted to Flickr by institutions around the world.
- **FreeFoto.com** – FreeFoto claims to be the largest collection of free photographs on the Internet.
- **FreeImages.co.uk** – Free to use images for both commercial and personal use under an attribution license sites including Flickr's Creative Commons images.
- **ImageAfter** – an image collection for commercial or non-commercial use.
- **MorgueFile** – high-resolution images are free to use without attribution.
- **OpenClipArt** - a free clipart gallery.
- **OpenPhoto** – Creative Commons-licensed images.
- **PicFindr** – searches across various 'free-to-use' image sites simultaneously.
- **Stock.xchng** – around 400,000 free images submitted by a large community of users.
- **University of Exeter Digital Collections** – an open access repository for images and multimedia.
- **VADS** – a selection of visual art collections comprising over 100,000 images freely available and copyright cleared for use in learning, teaching and research in the UK.
- **Veezzle** - a new search engine which finds free stock photos from a number of websites.
- **Xpert** -it contains metadata and resources for almost 120,000 learning objects including images from over 8000 providers.
- **Wikimedia Commons images** is a large collection of 'free-to-use' images.

Animation

What is animation?

Animation has a nerdy definition, "Rapid display of images to create an illusion of movement is called animation". Too nerdy? Well its simple "I draw series of images showing a man walking with each picture having one specific position of his leg movement. If I show you these entire set of images one after other real quick, the man magically seems to move! This is the basic ideology behind animation.

Animations are interesting. They have the power to gain the attention of a person for hours together without boring them. In addition, sometimes animations are extremely helpful. They help us show and generate interest in something, which we otherwise would not entertain.

On the other hand, learning is a pretty complicated process, well for me it's a nightmare when it comes to studies. Now when you analyze the process of learning, "Concentration" will stand out to be the major criteria for a better learning, followed by "Understanding" and finally "Remembering". All these go hand in hand.

Have you ever wondered why we forget all the history we have studied in our social classes? But you can easily remember a scene in some animated movie which we have watched long time ago? It is all in the way we got the information fed into our brain. Interesting/Boring both of these factors rule our learning process as well as memory.

Traditional ways of giving a lecture using textbooks and blackboards do not really convey the complete gist of a lecture sometimes; and sometimes, long lectures bore students and they get diverted easily letting him loose the first main criteria "Concentration". Now as I said before, the moment he loses his concentration, he does not understand the concept well and obviously can't remember the topics for a long time.

Now, what if I give the same lecture with an animation clip as a reference? Exactly! There is no point in loosing concentration. Because animations are interesting! They can be fun and informative at the same time. Animation today are not just confined to movies and video games; the areas of its application are boundless. And one of those areas is Education.

One of the reasons animations are now found so widely is that many people believe that animations can help learners come to understand complex ideas more easily. The process of teaching and learning gets a whole new experience when animations are used during the process. Both the teacher and the student as well find it more comfortable to explain or understand a topic; and believe me, no class will be boring. Teachers can use animated video clips to explain concepts (like cell biology, chemical bonding, heat transfer, etc.). This process not only makes the concepts clear but also helps the students memorize them for a longer time. Remember, humans have a very good pictographic memory; the more you make use of this the better the information is stored.

There are many multimedia enterprises out there, which make animation clips for education purposes and sell them. Some upload them for free online. Here are some of the websites, which provide free explanations for concepts using animations.

Here are a few tools for animation:

- **SAM Animation** - Free PC / Mac software, which allows you to make your own stop-motion animations. Thanks to Lucy Barrow for suggesting this in the comments.
- **Pencil** - Another free tool for PC / Mac / Linux users, which is a traditional 2D drawing / animation program. I haven't tried this one yet, but it's on my 'To Do' list!
- **Doink** - An online service which for viewing, creating and collaborating on animations. Requires registration.
- **XtraNormal** - A site, which allows you to make 3D, characters come to life by adding speech, scenery, actions and audio.
- **Fluxtime** - Create simple animations using this site, which is specifically designed for children. Requires registration.
- **FlickerBlox** - Make simple three frame animations online with this free site.
- **Scratch** - Excellent software for making animated stories. It is free and very easy for kids to use.

Audio:

Audio files and streams play a major role in some multimedia systems. Audio files appear as part of application content and also to aid interaction. When they appear within Web

applications and sites, audio files sometimes need to be deployed using plug-in media players. Audio formats include MP3, WMA, Wave, MIDI and RealAudio. When developers include audio within a website, they will generally use a compressed format to minimize on download times. Web services can also stream audio, so that users can begin playback before the entire file is downloaded.

Using audio in teaching and learning

The use of audio is well established in education and has been used for decades. From the humble audio cassettes of the 1970s, to accompanying nearly all video recordings, audio has a long history as a teaching and learning aid. Audio as a format has great breadth and depth, which means there is great potential for its use in education.

Audio demonstrated a capacity to facilitate authentic engagement, allowing students to connect in various ways to the outside world, both as listeners and publishers. The ease and speed with which digital audio can be deployed was used to support timely interventions and in some cases promoted information currency and responsiveness." Beyond podcasting: creative approaches to designing educational audio ALT-J, Research in Learning Technology, Andrew Middleton p153

The diversity of activity that takes advantage of audio has not changed much in many years. However, in recent years there has been new exploration into 'digital' uses for audio, which were anticipating taking advantage of the potential that is unique to digital audio.

The majority of uses for digital audio, to date, have been replicating traditional activities (e.g. recordings of lectures), yet this digital medium has the potential to offer much more. As use of digital learning technologies continues to grow around infrastructure (e.g. the virtual learning environment) and as teaching and learning pedagogy evolves within 'uniquely' digital contexts, we have begun to see new methods for using digital audio recordings within teaching and learning.

The widespread popularity of audio is due, in the main, to its ubiquity in our culture and ease of use both from a listener's perspective and more recently in the creation of audio. The tools have gotten easier to use and better documentation has lowered the entry barrier. Furthermore, affordable recording devices are readily available, particularly with most mobile phones now able to record audio to an acceptable standard, giving the majority of people the means to create and use audio.

Some examples of using audio in education

Audio is a flexible medium, which means that there are many applications within an educational context. The examples of audio uses below show that audio can be used both directly for teaching, e.g. an activity is formed around an audio resource, and as incidental activity where audio plays a minor role:

- Providing student feedback using a voice recording that is sent to the learner either to supplement written feedback or as a replacement. An example is the 'Sounds Good: Quicker, better assessment using audio feedback'.

- Student generated recordings, which may be used as part of a learner activity or to record evidence.
- Interviews with subject matter experts, which can be listened to and used as primary sources of information or smaller and incidental uses. The Centre for the Study of Social and Global Justice at the University of Nottingham has made a selection of their recordings publicly available.
- Public lectures are enjoyed live and face to face. The recordings can be repurposed for teaching material and used for different contexts and subjects. The University of Oxford has been making many of their lectures publicly available.
- Live online discussions can be conducted via audio tools and platforms between two or more people and this facility is frequently used for distance learning.
- Audio source materials from the past and present which can be used as part of a teaching activity. Oral history materials for example may be used by students to get a rich description of a past event.

As a demonstration of the ability for audio to play a significant role in education, Diana Laurillard lays out a scenario around live online discussion centred around audio as a vehicle for activity:

Pedagogical uses for audio

In order for students to benefit significantly from the provision and creation of audio resources, they should be at the heart of the pedagogical design.

An example of a common audio tool 'feature' that supports a pedagogical use, is timeline based comments. Many online audio players allow comments to be tagged along the timeline so that the listener can skip to parts that the lecturer suggests. This commentator could be the teacher or fellow group members.

Professor Tony Bates, an expert in distance education, provides examples of contextual uses for audio such as 'to bring students primary audio resource material, recordings of naturally occurring events, e.g. political speeches, to present, analyse or critique complex arguments', see 'Pedagogical roles for audio in online learning'.

Once you have chosen a teaching and learning context you can combine it with any one or more of the following pedagogical applications:

- To define teaching activity (typically task driven)
- To support learning through acquisition "what learners are doing when they are listening to a lecture or podcast", Laurillard (2012) Teaching as a Design Science. Routledge p105
- As a basis for an argument
- To support learning through discussion – which are recorded for evidence
- To support assessment through media enhanced feedback
- Audio submitted student evidence - e.g. proof of collaboration
- To summarize previous teaching
- To enable students through repetition and practice to master certain skills or techniques
- To make recordings of naturally occurring events, e.g. political speeches
- To represent concepts and ideas

- To update the course when the knowledge base changes
- To facilitate discussion for distance learners, collaborative learning
- For language teaching helping to develop listening and speaking skills

Finding audio

Many people prefer to find and re-use audio materials rather than create their own. There are many guides that are available for you to discover suitable audio resources and here you can have some of helpful resources to get you started.

- JISC Digital Media finding section - collection of our guides about 'finding' materials
- JISC finding video, audio and images online - how to find materials including links to digital collections and some helpful guidance.

Podcast

What is a Podcast? Podcasts are an Audio broadcast available on the Web. You can download podcasts for free to a personal computer or a digital audio player. A podcast can be played through a variety of digital audio software and hardware. They are not limited to the iPod brand products developed by Apple.

A podcast presents your audio file within an RSS (Really Simple Syndication) feed, which actively pushes out information about added content to subscribers. Once students have subscribed to your podcast RSS feed, then new course materials will be automatically flagged for students' attention as they are added to the podcast. This obviates the need to announce every new addition to the course documents list. In practical terms this means that if at the beginning of a course all of its members subscribe to that course's podcast feed, and instruct their computer to check regularly for updates, then all materials added to this podcast at any later date will be immediately announced and made available to all subscribers through their media player (iTunes or similar). As such, podcasting is a more reliable method of notification than email, which can sometimes get overlooked in a busy inbox!

Creating an Audio Podcast

An introductory guide to recording an audio podcast on a computer with a microphone and free open-source software.

This advice document will help users with little or no experience of recording audio to record their voice onto their computer using free software and simple peripherals. It then covers basic processing and editing of their recording and mastering it to a final format - in this case MP3. Simple instructions are then given for delivering this recording as a podcast through an institution's VLE and for archiving projects.

Suitable material for podcasting

Podcasts are ideally suited to presenting a series of audio and/or video recordings connected by a common theme and delivered at regular intervals, or a longer recording chopped up into bite-size 'episodes'. They are often described as being 'like radio shows'. While this is a useful analogy it is not completely correct, as podcasts can - in the broader sense - include a visual and/or text element as well as audio. In the context of this beginner's guide, however, we will assume an audio-only podcast.

Podcasts are ideal for providing audio versions of course material for students, and as such are of particular value to visually impaired learners, but they can also help engage students less able (or less motivated) to attend lessons and lectures or to read course material, and provide them with support in a palatable and easily digestible form.

What is a podcast?

To begin to explain the nature of a podcast, I will begin by clarifying what a podcast is ***not***. A podcast is not in itself a file format, nor is it a special type of audio or video file. It is rather a **method of delivery** - via the internet, or an internal intranet - for these types of media. Most digital audio and video files (or indeed any type of file) could theoretically be delivered as a podcast, but the popular form is an audio or video resource which has been recorded as (or divided into) short episodes, then compressed to be compatible with the intended playback device(s) and posted on a web server.

Users can 'subscribe' to a particular podcast series, either with a media player program such as iTunes or Juice, or an RSS reader within their browser, and then every time the podcast is updated by its author with new material subscribers will be notified of the posting of a new episode and can choose to download it. Some podcast clients (Apple iTunes for example, the most popular podcast client, which is available free for Windows and Apple OSX) can be set up to check for and download new episodes automatically, as soon as they become available.

Once the episode is downloaded, podcast subscribers can then watch or listen to their new content on their computer or transfer it to a mobile device (eg an iPod - hence the origin of the term 'podcast') to listen to on the bus, at the gym, or wherever. Again some podcast clients have the ability to update mobile devices automatically upon connection to the host machine, and indeed some newer mobiles can even download podcasts directly from the internet, bypassing the computer completely.

Getting started, and making a test recording

To make an audio recording on your computer you will need some appropriate audio software, a microphone, and some means of listening back to your recording (ideally some good quality headphones). For our purposes a free, open-source program called Audacity will be ideal for recording duties. It is widely available for download from the internet and compatible with most PC systems. Its features are quite basic but it will allow recording of multiple audio 'tracks' which can be edited and then played back simultaneously, mixed together, and rendered to a standard stereo mp3 file, which is what we intend to do now:

1. Install Audacity on your computer (or an equivalent audio recording package of your choice). Download and install the LAME MP3 encoder , which will allow you to export your final podcast from Audacity as a compressed mp3 file for easy distribution. If you are using a different audio program of your choice, ensure that it is similarly enabled.
2. Plug in your microphone/headset - your computer should automatically recognize the device and install any necessary software drivers. Drivers enable the computer to communicate with a device and to understand its commands, and are usually

included with a USB device, or available from the manufacturer's website. Many USB microphones are now simple plug-and-play, and will install their drivers without further intervention, on connection to the USB port. Either a USB headset or microphone will connect directly to the computer via a USB port, bypassing the system's soundcard completely. This ease of set-up is the main reason we recommend these devices for your initial sessions.

3. Position the mic on a small stand on a desk or table, or on a floor stand if you prefer, at a short distance from the speaker. 5-30cm is ideal, generally the closer the better, as long as the speaker is comfortable [although be aware of the proximity effect at very short distances]. If you are using a headset, you clearly do not need to worry about this step, as the mic will be on the end of a small arm attached to the headphones. If you are using a separate USB microphone, place it on a stand, which places it on a level with your mouth in either a sitting, or standing position - your preference.
4. If you are using separate headphones, plug them into the headphone output of the computer audio interface (soundcard), and adjust the volume to a comfortable level, starting from zero. If you are unsure how to adjust your audio settings, they are typically accessible from Start>Control Panel>Sounds and Audio Devices on Windows, or System Preferences>Sounds, and the Audio/MIDI Setup application (in your Utilities folder) on Apple Mac OSX. If you have a music track with which you are familiar on your computer, then use this to test your headphone connection.
5. Launch Audacity (or equivalent), and check that your microphone is selected as your input device [Audacity's menu path is: Edit>Preferences>Audio I/O>Recording>Device: 'name of your microphone'] and set it as a mono source [Edit>Preferences>Audio I/O>Recording>Channels: 1 (Mono)]

What you will now see is the main project window. Most audio workstation programs work on very similar principles, and Audacity is no exception: a toolbar and time-line at the top, then below it one or more audio tracks, running parallel to each other, each with its own level (volume), pan (L-R balance), and a graphical representation of the sound wave, over which the 'play head' - a vertical line - will travel left to right as you move through your track, indicating your position within it.

Press the record button on Audacity's transport, and speak into the microphone (testing, testing ... one two one two ... Mary had a little lamb, etc.) at a natural volume, with one or two louder words, and a couple of sibilant ('s') and plosive ('p', 'b') consonants. Press stop. Return the transport to the beginning, and press play. You should hear your recording, and see a depiction of its audio waveform, running horizontally; if not, check connections, and that your mic and headphones are selected as your input and output devices respectively.

Listen back to your voice. If you hear distortion, then your level is too high, and you should reduce the input level (there is a slider next to a microphone icon at the top of the Audacity screen to control microphone input level), or move further away from the microphone. Similarly, if the level is too low, turn it up, or move closer, as amplifying too quiet a

recording at the mixing stage will also amplify any background noise (hiss), as well as sounding more "grainy" and low resolution. You can use the level meters in Audacity to visually gauge input levels.

If plosive consonants make a 'popping' sound (caused by the pressure wave they can produce when hitting the microphone pickup) then you should use a popshield. These are commercially available, or you can fashion one from coathanger wire bent into a circle a few inches across with fine stocking material stretched over it, and placed an inch or so in front of the mic.
Once you are happy with the level and sound, do a couple more practice takes, until you feel comfortable with the microphone.

Planning
Write some notes outlining your podcast episode and run through them, speaking aloud to get a feel for the 'script' and an idea of its length. You don't need to write it out word-for-word, though if you plan to provide a text transcription this may be useful. Speak in your normal voice, and try neither to rush nor to speak too slowly - just act natural! Time yourself; as a guideline, podcast episodes of around 5 minutes will give you time to get into your subject, but won't run on and risk losing the attention of your (YouTube generation) audience. Clear, concise episodes will maximize the impact of your material.

Recording
Ensure that there is no background noise (hoovering, TV etc.) coming from adjoining rooms, pour yourself a glass of water, and settle down in front of your microphone with your notes. Sitting down may be more comfortable, but standing up allows for better breathing and a more dynamic approach - choose whichever suits you better or feels more natural, or try both and listen to the differences. Press record, leave a few seconds 'lead-in', then begin speaking. Again, take your time and stay relaxed - if you are unhappy with your first take, you can do another, so there is no pressure. It can help, in the absence of an audience, to imagine yourself explaining your material to an attentive listener.

If you make a mistake, cough, etc. you don't necessarily need to start again. Just wait a few seconds, then carry on from a point shortly before the mistake, and you can edit out errors later (see below).

When you have finished, leave a few seconds of silence, then press stop. When you have captured a successful take, you can begin to prepare it for delivery.

Editing
If you have managed a single uninterrupted take, then you may not need to do any editing at all - well done! If you coughed, or made a mistake, which you wish to edit out, then this is the simple method for doing so.

Inspect the waveform of your recording within Audacity, and find the offending glitch in your otherwise perfect performance. You may need to use the zoom tools to get a closer

look, which all look like icons of a little magnifying glass, and have various fairly self-explanatory functions. Clicking on the waveform display with the selection tool will enable you to jump to different points in the recording for a quick listen, to find the section you want. If you have left gaps after any mistakes - as recommended - this should make identifying them by inspection of the waveform easier, as you will notice portions of silence as flat sections in the waveform. You can add labels at any point, to mark sections for editing or reference, by using the Project>Add Label menu commands. Once you have established which section of the waveform needs removing, choose the 'selection' tool (top left corner of the toolbox) and click and drag across the unwanted section to select it. It will be highlighted in grey. Now choose Edit>Delete, and the selected section will be removed, and the two sections either side of it will be joined together.

If there are unwanted variations in level (volume), or if you wish to fade in at the beginning and fade out at the end, then you can use the 'envelope' tool to automatically change the volume of each track as it plays back. As you use it to add level automation points, the waveform display will change to reflect the variations in volume over time. These automation points can be picked up with the mouse and moved around until you achieve the desired effect.

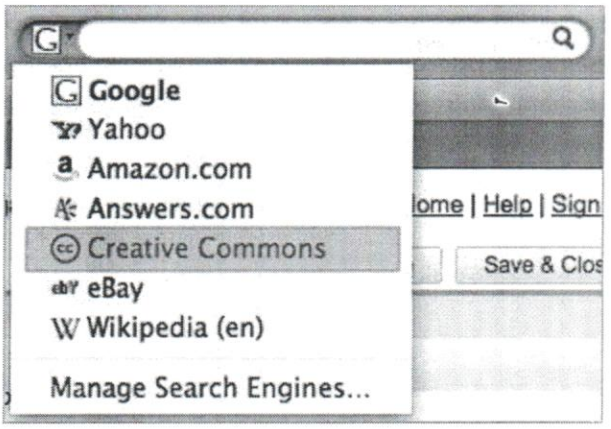
These are probably the only tools you will need to use to perform basic editing. Audacity's editing, in common with most audio programs', is non-destructive - i.e. the original recording is not altered by the editing procedure, but merely the order in which it is played back. If you get a bit over-enthusiastic with your editing, you can always fall back on the trusty Ctrl+Z (Undo), or the toolbar Undo/Redo buttons, which will cycle you backwards and forwards through the undo history an unlimited number of stages since the document was last opened. This can also be a handy way of trying out edits or effects.

Adding music and sound effects

Incidental music and sound effects can add depth and a professional sheen to your podcast. They can help set a mood, demonstrate or reinforce a point, and effectively 'bookend' an episode. For example, you could add short sections of recorded native dialogue or music to a language lesson podcast, or a suitable atmospheric soundbed to a history lecture.

Most audio software (including Audacity) will allow additional tracks of music and effects to be placed alongside the master narrative track. Music and effects can be automatically faded in and out with the 'envelope' tool, as explained above, and their individual levels set with the volume slider in the tool panel at the left hand end of each track.

N.b. - Care must be taken to observe copyright restrictions of any additional music, sound or video resource not produced by yourself. If in doubt, do not use it! There is a significant amount of royalty-free music and audio material available for educational use under Creative Commons terms. Some internet browsers (eg Firefox) include a Creative Commons search function, selected from a drop-down list at the end of their search box:



Creative Commons material can generally be used free of charge for non-commercial purposes. Many producers of this material simply ask that users credit them for their work, so be sure to list composers/producers where requested, and check terms of use.

You can add any WAV, MP3, Ogg Vorbis, AIFF or AU audio file to your Audacity project, by using the Project>Import Audio menu command, and then selecting the relevant file. A new track will be automatically created, whose level you can again control with the track volume control and 'envelope' tool. Use the 'Time Shift' tool to move the audio into the correct synchronization position with the voice track. You can add multiple additional audio tracks for different music and effects, and they will all be 'mixed' at their respective levels when you come to render your final mix.

Exporting an MP3

When you have your track sounding as you want, you are ready to render it as a stereo mix, suitable for distribution by podcast. We have chosen MP3 as the podcast file format as it is familiar to most users, compatible with almost all devices, and offers a wide range of compression settings, as well as rich metadata.

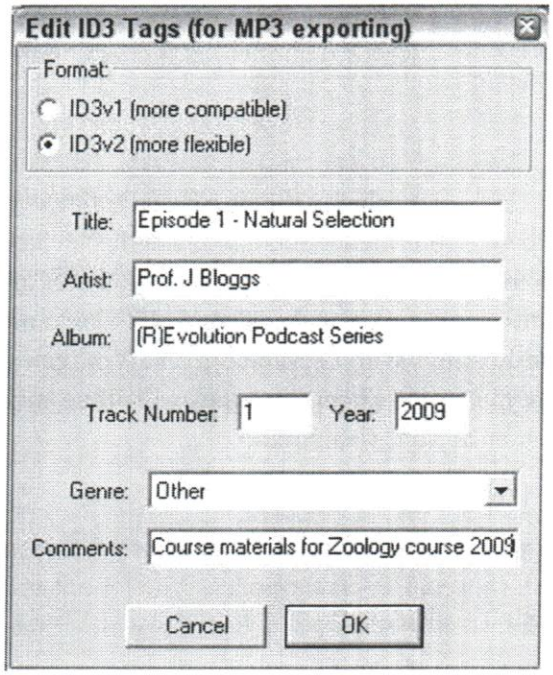
In Edit>Preferences>File Formats you can select the bitrate (quality) for the exported file. The higher the bitrate, the better the sound quality, but the larger the file size. A bitrate of 128kbps will usually give perfectly acceptable sound quality for most uses, with a relatively small file size - approximately 1Mb per minute. You can experiment with lower bitrates for even smaller files, but the compression artefacts begin to become quite audible. Variable Bit Rate (VBR) encoding allows the software to alter the bit rate it is using to suit the complexity of each section of a file, and can afford significant additional filesize reduction, while allowing higher bitrates for more dense sections. Try using VBR on your material, and compare the results to a fixed bitrate version.

To export, go to File>Export As MP3 and choose an export destination.

Adding Tags (Simple Metadata)

MP3 files allow the inclusion of extensive additional information about the origin and nature of the audio content. This information is called 'metadata', and in an MP3 takes the form of ID3 tags. These are the same as the tags which media players use to tell you the artist, album, year, track number etc of a commercial MP3.

You may want to add some of these tags to give information on title, production dates, authorship, ownership, content, genre etc. of your audio. If you want to begin adding this metadata at the production stage, then before you export your mix from Audacity, go to Project>Edit ID3 Tags and enter whatever information you want packaged with your audio into the fields provided. Including metadata at this stage will help you keep track of your audio catalogue in the future, and it is always worth spending a few minutes on it - you may remember a project's details now, but in a month's time maybe not!



Alternatively, your ID3 tags can be added or edited later in more depth within an audio player such as iTunes. Open iTunes and right click on the file, and choose 'Get Info'. The window which opens will allow you to edit what additional metadata, and even artwork, you package with your mp3.

Delivery by VLE

The most common VLE platforms - Blackboard and Moodle - do not include native features to allow podcasting, and require the addition of third-party plugins (such as Podcast LX and Wimba) to offer true podcasting - i.e. a subscribe RSS feed. If your VLE does not have podcasting facilities (which you can verify with your IT support team), or you prefer a simpler tool, then there are other options open to you for delivering audio recordings such as our MP3 - chiefly a simple 'File Download'. Some analysts argue that advertising a file as available for download is just as effective as podcasting for reaching the desired audience, so don't let the absence of a special podcasting module on your VLE discourage you from producing support materials in audio and video formats - there are perfectly valid alternatives.

File download

You can - in the absence of podcasting facilities - make your audio recording available to students as a simple download, a basic feature supported by all VLEs (although some have limits on file sizes, so be aware of this when choosing your MP3 bitrate etc). The quality and format of students' downloads will be identical to audio files acquired by podcast subscription. As noted above you can email course members to inform them of the availability of new online materials, and if you include a link to the relevant page on your VLE in your email then they can simply visit the appropriate course content area and download the new audio file(s) manually.

For either method of delivery you will need to sign into the relevant course with your instructor credentials and select the Content Area where you wish to publish your audio material. In Blackboard, switch to 'EDIT VIEW' and add a new item with the +Item key or

Select>Podcast Episode>Go, depending on whether you intend to add a file for download or deliver it as part of a podcast series, and upload your MP3 from your computer.

Which method you choose is of course up to you, but longer-term maintenance of a podcast will be easier and its use is more readily scalable, though initial setup and technical requirements can be a little more demanding.

Archiving your Projects

As well as exporting the final mix to mp3 it is wise to archive the complete Audacity project as well, which will include all the separate recorded files, edits etc. Should you wish to go back to create a more high-quality mix or one in a different file format, add effects, or re-use the audio material in its raw form for any other purpose, you can simply re-open the project and continue from where you left off. Create a folder for Audio Projects in My Documents, and save your Audacity projects to it, which will use the .aup file extension.

Bear in mind that the Audacity project will store all recorded files at their original quality and may therefore be quite large! For long-term archiving, you may want to copy these projects to an external drive or burn them to data DVD, allowing you to erase them from the computer hard disc to free up space.

Equipment Notes

The Suggested Equipment list below constitutes a basic set-up to produce what we would consider acceptable audio quality, but you can substitute any element if you are confident to do so. For recording software, we recommend Audacity as it is well established, popular, free and cross-platform, but you can of course use alternative audio software of your choice. If you have a recent Apple computer, you may prefer to use Garage Band, which is included free with later versions of Apple's OSX operating system and offers many additional features designed for podcast production as well as video podcasting and soundtrack creation features. There are alternative Windows programs such as Reaper.

Many external soundcards include free 'lite' versions of commercial audio recording packages which will often offer excellent features perfectly suited to our purpose. Many are also available in downloadable evaluation versions should you wish to experiment, though some may have a limited evaluation period before requiring purchase, so read the terms carefully. As long as you can render and convert your final recording as an mp3 audio file then the specific program you use is largely immaterial, and a matter of personal preference. Contact our sound support team if you would like further advice.

We recommend a USB microphone purely for simplicity; many cheaper microphones are available which will plug into your soundcard mic input, and will give mixed results. Many home PC soundcards have acceptable playback quality but poor recording quality, and a USB mic will usually be superior unless your PC has an upgraded audio interface. The microphone inputs on most Apple computers are generally of acceptable quality. If you do intend to use a separate microphone and soundcard then as long as the relevant drivers are installed for the interface all other sections of this guide will apply unchanged.

Suggested Equipment

- Mac or PC with a suggested minimum 1GHz processor, 1Gb RAM (2Gb+ preferable) , 1Gb+ free hard disc space, a headphone output (if not using a headset), and free USB port. Windows XP/Vista, Linux or Mac OSX operating system.
- Audacity audio recording / editing software with LAME mp3 encoder plugin [Audacity and LAME are free and open source for all platforms] or Garage Band [Mac only].
- USB microphone (e.g. Rode Podcaster, a high quality, though more expensive option), or USB headset (headphones and microphone combined - a simpler and cheaper option, though more basic in sound quality) such as the Sennheiser PC166, or one of the Logitech Clear Chat USB range. All of these devices have built-in USB audio conversion, and either headphones or a built-in headphone output, so do not require a computer soundcard at all.
- Headphones (if not using a headset)
- Pop Shield
- iTunes media player and podcast client

Picasa

Picasa 5 (3.9) Photo Editing Tutorial How to download, install and use the Picasa Photo Editor How to web optimize your photos for use on the internet

Step 1: Download Picasa Software

Go to: http://picasa.google.com/ (Copy and paste address into browser if viewing PDF version) and click the download button.

Picasa in the Classroom

What is it? Picasa is a free application that helps you instantly organize, edit, and share all the pictures on your PC. It automatically locates all your pictures and sorts them into visual albums. Picasa also makes advanced photo editing simple. Picasa Web Albums allow photos from Picasa (or iPhoto on a Mac) to be uploaded to the web quickly and easily. Students and parents can then access an online slideshow (complete with captions) and download the pictures they like.

Why use it?

Students can use Picasa to:

- Organize and manage photos for projects and reports.
- Quickly edit photos and other images.
- Share photos of school events with friends and family.

Teachers can use Picasa to:

- Create an album for each student.
- Quickly create a slideshow for open house.
- Share field trip photos online for parents.

Instructional Ideas

Elementary: Take pictures of student work, presentations, or field trips throughout the year and quickly turn them into a slideshow that you can play at open house or during parent conferences.

Middle School: Students can create a historical photo album by taking pictures of themselves in historical costumes and settings. Then apply sepia tones or black & white effects to make them look like old photos and print them out - or share them as a web album.

High School: Journalism students can keep all photos for each edition of their newspaper or magazine in one location on their classroom PC, adding descriptions and captions that make them easy to find, re-use, and share.

Additional Resources More about Picasa

- Picasa in Education http://picasained.wikispaces.com
- Adobe Digital Kids Club http://www.adobe.com/education/digkids/lessons/index.html
- 10 Tips for Capturing Great Photos http://education.apple.com/education/ilife/howto/digitalphoto_tips/

SLIDESHARE (Address: http://slideshare.net)
Slideshare's tag line is "Present Yourself" which sums up what this site is about. You can upload your PowerPoint presentations, Word document and Adobe PDG files to share publicly or privately.

File formats that are supported are ppt, pps, pot, pptx, ppsx, potx, OpenOffice, and Keynote. Document formats supported are PDF, Microsoft Word, Excel sheets, OpenOffice files and text files. The maxmum allowed file size is 100 MB.

One downside is that the site does not support audio and videos embedded inside presentations and slide transitions and animations.

You can also search for slideshows on topics of interest. Many, although not all, presentations can be downloaded. Transcripts are included with many of them.

Take a tour – **"Why You Should Use SlideShare."**

What is SlideShare?
SlideShare began with a simple goal: To share knowledge online. Since then, SlideShare has grown to become the world's largest community for sharing presentations and other professional content.

SlideShare was founded in October 2006 and acquired by LinkedIn in May 2012. It allows users to easily upload and share presentations, infographics, documents, videos, PDFs, and webinars. In Q4 of 2013, the site averaged 60 million unique visitors a month and 215 million page views. SlideShare is among the top 120 most-visited websites in the world.

How can you benefit from using SlideShare?

Discover and Learn
SlideShare consists of more than 15 million uploads from individuals and organizations on topics ranging from technology and business to travel, health, and education. Find and search for what interests you, and learn from people like Guy Kawasaki, theWhite

House, Mashable and more. You can also download SlideShares to read or reference later. (See more top SlideShare authors)

Share and Connect

Share the content that matters to you with your colleagues, customers, friends and followers. SlideShares can be embedded into websites and blogs, and are easily shareable on LinkedIn, Twitter, Facebook, and other popular social media platforms. They can be viewed publicly and privately. Connect with other SlideShare users via comments, "likes," and profile pages.

Present

Have an idea, story, research project, presentation, photo collection or expert knowledge on a topic? Upload it and reach a wide audience! Here are more ideas for what to upload on SlideShare.

21st Century Skills

Students can use this site to communicate with different audiences using digital media and environments. The site allows students to share their work, view other students' work and make comments.

In the Classroom

First, the site is a treasure chest of resources for teachers to use. Presentations on many different topics can be found using the site's search feature. This PPT "Planet Earth" could be used as an introduction to a science unit on biomes.

The site has a widget called Playlist that creates a customized list of your uploaded presentations or other presentations that you have in your Favorites list. The playlist can be embedded on a blog or wiki.

Scribd

Your own personal digital library! On Scribd you have unlimited access to the world's largest collection of e-books and written works. In our **premium membership** collection that costs just $8.99 per month, you'll have access to over 400,000 books from over 900 publishers, including New York Times bestsellers, literary classics, groundbreaking non-fiction, and more in every genre! And we have millions of more titles from landmark court fillings to scholarly papers from around the world. If you love words, you've found the right place.

Scribd is a place to discover new books and authors. You can fall in love with our editorial collections and personalized recommendations just for you.

Scribd is a personal library you can carry in your pocket. Read instantly on your mobile devices anywhere! Log into Scribd from our apps on your iPhone, iPad, Android, or Kindle Fire or access Scribd.com on other mobile device to access millions of titles where ever you want. We mean personal pocket library. You can save your favorites, create collections, bookmark titles, and create the library you've been dreaming of.

Scribd is also your own personal publishing company. If you're an author looking to publish your work on Scribd, you'll be putting your work on a site with 80 million readers around the globe. And our conversion technology makes it easy for someone to convert any book or written work into a beautiful webpage or mobile experience. Further questions on how to publish? Check out our Publishing Guides.

Technology

In July 2008, Scribd began using iPaper, a rich document format similar to PDF built for the web, which allows users to embed documents into a web page. iPaper was built with Adobe Flash, allowing it to be viewed the same across different operating systems (Windows, Mac OS, and Linux) without conversion, as long as the reader has Flash installed (although Scribd has announced non-Flash support for the iPhone). All major document types can be formatted into iPaper including Word docs, PowerPoint presentations, PDFs, OpenDocument documents,

OpenOffice.org, XML documents, and PostScript files.

All iPaper documents are hosted on Scribd. Scribd allows published documents to either be private or open to the larger Scribd community. The iPaper document viewer is also embeddable in any website or blog, making it simple to embed documents in their original layout regardless of file format. Scribd iPaper required Flash cookies to be enabled, which is the default setting in Flash.

On May 5, 2010, Scribd announced that they would be converting the entire site to HTML5 at the Web 2.0 Conference inSan Francisco. TechCrunch reported that Scribd is migrating away from Flash to HTML5. "Scribd co-founder and chief technology officer Jared Friedman tells me: 'We are scrapping three years of Flash development and betting the company on HTML5 because we believe HTML5 is a dramatically better reading experience than Flash. Now any document can become a Web page. In July 2010 *Publishers Weekly* wrote a cover story on Scribd entitled "Betting the House on HTML5.

Scribd has its own API to integrate external/third-party applications.

Since 2010, Scribd has been available on mobile phones and e-readers, in addition to personal computers. As of December 2013, Scribd is available through the various app stores on iOS and Android smartphones and tablets, as well as the Kindle Fire and Nook tablets.

eSnips

eSnips is a site that offers content-sharing services. On this site, registered users can publish and share their data. As much as five GB space is available for each user along with various flexible options that let one decides how one wants to share the data online.

eSnips is a place where you can share a lot of things. You can share your flash files, yourvideos, your music, your photos, and a number of other media types. You can create different online folders for different content and set sharing permissions as per your preference. Some of

the preferences that are available online include public, group, and private. Features such as esnips download, eSnips favourite, eSnips search are very helpful.

You can browse the profiles of various users and find some very interesting stuff online. It will also help you to network with people having similar interest.

How is eSnips Different From Other Online Social/Sharing Sites?

There are several interesting eSnips features. They include

- Almost every type of content is available on the site
- With just one account, you can manage a lot of things. It gives you the option to create different folders for content and then share as per your preference. You can give different level of access permissions to users. The flexibility offered by the site is perhaps the best among other content sharing sites.
- eSnips help in forming a community of people that have similar minded interests. This help you in getting company of people with whom you can share a lot of things.
- eSnips download feature offers fast download facilities.
- eSnips search feature offers for fast and quick search of online items

eSnips site has been designed for people who love to share . You can share almost anything including movies, information about various topics, some nice articles related to your hobbies and things of interest. The more you share online, the more popular you get. You may soon find everyone interested in connecting to you online.

The site is very easy to use. The features provide help you update your information as soon as you make any updates. The site is for people who love to share and want to have community of likeminded people.

DocsToc

Docstoc is an electronic document repository and online store, aimed at providing professional, financial and legal documents for the business community. Users can upload, share and sell their own documents, or purchase professional documents written in-house by professionals and lawyers.

History

Docstoc was officially launched by co-founders Jason Nazar (CEO) and Alon Shwartz (CTO) in October 2007, one month after its debut at the TechCrunch40 Conference. Docstoc began as a resource for sharing documents (including .doc, .pdf and .ppt formats), and allowed users to embed documents on their blog or website. Docstoc announced its emergence from beta on May 13, 2009 and introduced several new features, including revenue sharing with users through advertisements. Docstoc was initially compared to content sharing databases such as Scribd, but after its departure from beta evolved into a resource focused on the needs of business owners. The company expanded rapidly in 2011, and currently employs over 30 people.

Technology

The original Docstoc technology allows users to upload, share or embed documents on their website. Features such as DocShots allow users to hover over an embedded document link and view a preview without having to download it. Documents can also be set to private, and shared with select people.

In 2010, The Docstore Marketplace was launched, and Docstoc encouraged professional users such as lawyers, accountants and real estate brokers to earn revenue from selling their own business documents on the site. Users can sell their commercial documents (such as contracts, business templates, technical guides or academic papers) and split the revenue with Docstoc. All of these seller documents must be approved by Docstoc before being placed in the Docstore, in order to manage professional quality. Document owners can also register for DocCash, a service which generates 50/50 revenue from advertisements between Docstoc and the user.

In 2011, Docstoc focused on producing its own high-quality business content, with the goal of creating 10,000 professional documents internally by the end of the year; these premium documents were in addition to the over 20 million documents already uploaded by users. It also developed partnerships with content providers such as LegalZoomand ProQuest Dissertations, and produced its own articles and videos featuring tips for business professionals. For users interested in frequent use, the website launched Docstoc Premium, a subscription service that allows users to access premium business documents and packages using credits, and surf the website without advertisements. Users can also access Docstoc Premium documents remotely through the iPad app, which was launched in May, 2011.

10 Readiness and Necessities to bring together ICT in Assessment

Dr. Sanjay Kumar Pandagale
Associate Professor in Education,
Regional Institute of Education, NCERT, Shyamla Hills, Bhopal-462013
http://wikieducator.org/User:Psanjaykumar
https://www.facebook.com/psanjaykumar
Email- sanjaypandagale@gmail.com
+91-9826296282

Introduction

Today's world is a world of technology and education is not indifferent to it. Nowadays, Information and Communication Technology (ICT) is used in every aspect of educational process, ranging from admission to assessment. However, the role of ICT in assessment is not much harnessed by the educational functionaries and stakeholders. Assessment is as important as teaching. Without it, we cannot ascertain the progress of the student. Though its not liked by many, however, it cannot be avoided or removed from the educational system. Therefore, there is an urgent need to focus on the potential of ICT to be used in assessment in particular and educational process in general to make teaching learning, especially, assessment process easy and attractive. For this, the burning issue is an examination reform as suggested by NCF 2005.

Assessment, evaluation, examination reforms and ICT

ICT can enable a number of interactive applications, supported by databases, which can store and facilitate search and query. A number of applications have been developed to assess and evaluate products and processes. Examples can range from-

- *Simple question banks,*
- *Automatically generated question papers,*
- *Online tests,*
- *Automated assessment and*
- *Feedback.*

Leveraging these applications for education can result in improved practices of tests and examinations. They can not only reduce the time involved but also spare that time for the much-needed academic input. Supported by audio-visual and interactive media it can enhance the range of questions, particularly the testing of higher order questions, which do not easily lend themselves to paper pencil tests. At a systemic level, an automated examination service can facilitate on demand examinations, allowing students to take the examination multiple times, without any increase in the administrative processes.

ICT can be utilised for continuous comprehensive evaluation. Designing databases, which can store student records of performance; longitudinal tracking of students can be undertaken more efficiently and guiding students towards improved performance in different areas of growth and development. It would not be possible for a large school system to make drastic changes. It would therefore be necessary to engage with the concept of examination reform, identifying various issues.

Preparing the system for deploying ICT for reform in assessment will involve:

- Evolving a reform agenda and path for assessment, evaluation and examinations; facilitating survey, research and analysis of the current status of assessment practices, student performance, cost-benefit analysis of the prevailing examination system; quality of tests and examinations, teacher capacity building in construction and implementations of tests and exams; access to resources;
- As an immediate step, leveraging ICT to manage the examination system; enrolling students, issue of admission cards, information to students and schools, declaration of results, etc.
- Developing networks of teachers, educators, researchers and counsellors; online courses for teachers and access to international practices; facilitation of research; forums for critical evaluation, introspection and analysis of student data, examination practices, research insights and teacher development.
- Developing question banks and software applications which can repurpose it to serve a range of tests and examinations; student support materials and resources to prepare students; guidance and counselling to students under stress;
- Automation of examination; In the short run, mechanisms for collection and compilation of student performance data across various tests and examinations, their analysis and feedback to the system; In the long run automated delivery and administration of tests and examination, online testing, leading to on demand examination.
- Integrating student performance data into a state wide Management information system (MIS) to facilitate analysis and research; feedback for system level planning; participation of teacher educators, researchers and educational planners.

All the process of conducting of examinations can conditionally be divided into the following stages:

- Pre-test examinations.
- Preparation for the announcement of the beginning of admission campaign.
- Reception of entrants' applications.
- Preparation for official examinations.
- Processing of examinations reports (minutes).
- Scanning of answer sheets and the analysis of information.
- Calculation of scores, conducting of competition and distribution on specialties.
- The report (announcement) of results of exams.
- Use of archival database.

1. Pre-test examinations

The benefits of pre-test examinations are-

- to check their knowledge in different subjects and, probably, to correct tactics of preparation for exam,
- to adapt to examination environment psychologically,
- to work with test books and answer sheets similar to real ones.

For participating at pre-test exams, it was necessary to apply to one of the examination centres and buy coupons for those exams. Processing and implementation of the web-application gave opportunity to be registered via Internet for any pre-test exam and for any place from the offered list in online regime and to receive; electronic coupon and it met the requirements of our citizens.

2. Preparation for the announcement of the beginning of admission campaign

At this stage, alongside with other activities, read-out forms are projected and printed (on technologies Optical Mark Read and Intelligent Character Recognition). Various forms can be worked out with this technology. Numbering and personification of forms are made on high-speed printers of industrial type.

3. Registration of applicants

Application forms of applicants contain the necessary information about them with the biographic data, the information about their education, the chosen specialties, etc. The information indicated in applications undergoes certain logic control (for example, the presence of a surname and a name in the reference list, accordance of surname to the gender of the applicant, accordance of the candidate's age to reasonable age limits) with the use of corresponding programs for further visual analysis and making corresponding decision.

Database of photos is created by scanning applications on industrial scanners and recognition of previously printed bar codes. Alongside with improvement of quality of images, this technology allows to save time and human resources.

4. Preparation for official examinations

After completing submission of applications and creation of a corresponding database, there comes the stage of direct preparation for examinations. At this stage, on the basis of the information available in databases Applicants, Examination buildings and halls, Examination managers (officers), Invigilators of examination halls, programmed distribution of applicants over examination halls is performed, buildings are determined for the managers (officers) of examination, and halls for invigilators, in which they will control examination. Pseudorandom numbers are used in the process of distribution. In the procedure of placement of candidates the algorithms are used which eventually, positively affect fairness of exam results.

High-speed industrial printers allow us to personify forms of the invitation to examination, answer sheets, lists of participants, and reports (minutes) of conducting of examinations for each examination hall within several days.

Photos of applicants are also printed for use during examination as one of complex methods of struggle against fraud.

Test items are automatically selected by using the program of generation of tests. The program receives a random number, the list of sections in each examination subject, from which items will be selected from the structured and classified item bank, and also requirements for the level of their complexity. The selected test items ready for printing are delivered to the printers.

5. Processing of examination reports (minutes)

After examinations, the examination reports pass careful processing. Formerly the information taken from reports was entered into a database manually. However, currently, this information is scanned by high-speed scanners and recognized with the help of the programs developed on the technology of ICR (Intelligent Character Recognition).

6. Scanning of answer sheets and analysis of the information

With the help of OMR (Optical Mark Read), scanning of answer sheets have become very easy task. With the purpose of excluding probability of mistakes, each sheet is exposed to double scanning on different scanners. Both received files are verified for identity. Insignificant distinctions in optic ability of scanners allow to reveal presence of uncertainly painted circles, blots. Depending on the character of difference, the sheet is exposed to scanning for the third time in the most appropriate mode of vigilance of the scanner. Further, the checked information is analysed by logical control program, the information, which is the result of presence of blots on forms, is excluded, and the list of applicants who did not participate in examination, etc. is formed. It allows receiving 100 percent reliable information in the result. Besides, the program analysis of the data allows revealing the cases of copying (cribbing).

7. Calculation of scores, holding of competition and distribution by specialties

Some programmers realize the scoring of answers, holding of competition and distribution of applicants by the specialties simultaneously. The information bases of applications, answers, reports and correct answers (the key) are used. With the purpose of prevention and exception of mistakes, the results of all three distributions are verified.

8. Use of the archival database

After the announcement of examination results, the information on exam participants and their results are added into the archival base, which saves the information about participants of all examinations. Due to the existence of this base, one can answer thousands of inquiries of citizens, various organizations, concerning this or that person.

Required technical infrastructure

In addition to personal computers and widely applied devices, technical infrastructure includes:

- OMR-scanners with productivity of 6000 forms at an hour.
- High-speed image scanner with productivity of scanning 6000 forms in an hour and the software for recognition and streaming input of hand printed information.
- High-speed industrial printers.
- The offset printing machine for printing on fanfold paper.
- The Internet - channel with the throughput 100 Mbit / sec.
- Digital communication link E1.

Thus, an examination can be conducted through ICT if the school system have above facilities.

Other ICT tools can be used in Assessment

1. Digital portfolio

Mahara (http://mahara.org/) is customisable and flexible. It is the perfect personal learning environment mixed with social networking, allowing you to collect, reflect on and share your achievements and development online in a space you control.

- Portfolio artefacts
- News letter
- Project report
- Blog posts etc.

Google sites (https://sites.google.com/) can also be used for this purpose.

2. **Online reflective journal** for Peer Assessment using http://edublogs.org/
3. **Digital rubrics** for assessing the portfolio and other activities using rubistar http://rubistar.4teachers.org/
4. **Digital checklist** for all other activities and products using online free form creator
   - googledocs- forms (http://www.google.com/google-d-s/forms/)
   - http://www.flubaroo.com/try-flubaroo-now
5. Develop and conduct a traditional multiple-choice **online test** using Easy Test Maker http://www.easytestmaker.com/ and google forms https://www.google.com/forms/about/.

6. Hot Potatoes

The Hot Potatoes suite includes six applications, enabling you to create interactive multiple-choice, short-answer, jumbled-sentence, crossword, matching/ordering and gap-fill exercises for the World Wide Web. This software can be downloaded and used for test making purpose.

Conclusion

It is established that the speed and accuracy can be many times increased if technology is used. Its uses reduce our labour with many more other advantages. Therefore, schools need to be equipped with these facilities to introduce the culture of ICT in examinations.

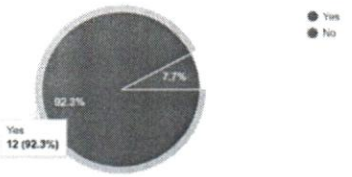
References

- Harding, R., & Raikes, N. (2002). ICT in Assessment and Learning: The Evolving Role of an External Examinations Board, 1–13.
- Khalilov, C., State, T., & Admission, S. (2007). Use Ict in Test Examinations '.

11 Session-wise Feedback by Participants

Feedback on Session 1: Introduction to Computer and ICT

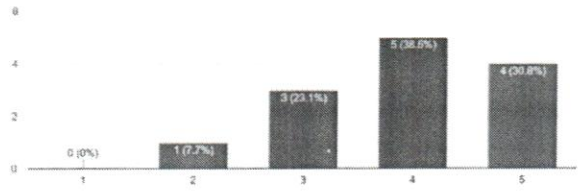
1. Which points covered in this session?
    - ICT in Education, Introduction in Computer
    - Information regarding ICT
    - How to prepared PPT? And basic knowledge of computers
    - Introduction to computer and ICT
    - Computer And Human body
2. Whether this session was useful or not?



3. If yes, what are the benefits of this session?
    - In Teaching and learning
    - Meaning of ICT, which covers not only computer, laptop, mobile but also covers technology for communication ex. media, newspaper, language
    - Trainees could know basic information of ICT
    - Useful to understand use of computer in Education
    - To understand use of ICT in education
    - In our works/profession in teachers training and D. El. Ed./B.Ed. trainees
    - Comparison make it interesting
    - Use of networking sites in educational field
    - It helped to get acquainted with some useful prevailing terms regarding Computers and ICT
4. What are the drawbacks or lacuna of this session?
    - No drawback reported by participants.
5. Provide your suggestion/s for further improvement.
    - More practical work
    - We can discuss on ICT's other topics
    - Require practical works & more time
    - Add some topics like AI and VR
6. How will you implement in your teaching?
    - Teacher training
    - I will inform student about ICT
    - For use during training & counselling
    - With use of ICT uses
    - Use knowledge of ICT in training programmes
    - We can give knowledge about computers to students
    - Use all the given techniques in this training to our profession

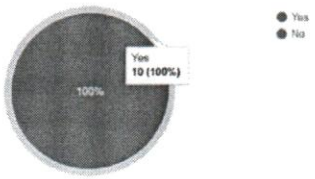
- Off course I do that in my teaching
- Give guidance to teacher's training
- When there will be need for some basics topics the training session will be helpful
- Skills of ICT

7. Where will you rate this session?



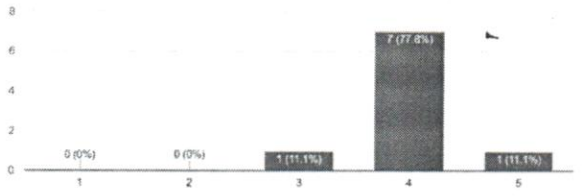
Feedback on Session 2: Making effective power point presentation

1. Which points covered in this session?
    - Effective Use of PowerPoint
2. Whether this session was useful or not?



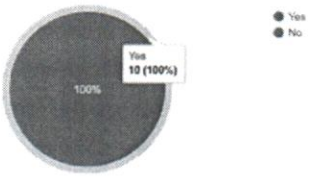
3. If yes, what are the benefits of this session?
    - To make teaching effective
    - We learnt How to prepare effective PPTs
    - Useful to prepare effective PPTs
    - Make PPTs on comp
    - It helped to learn some good options related with PPT presentation
4. What are the drawbacks or lacuna of this session?
    - No drawback reported by participants.
5. Provide your suggestion/s for further improvement.
    - More time is required for practical
    - Start presentation with poor to excellent
    - Add some more points like creating power point books
6. How will you implement in your teaching?
    - Make effective PPTs and teach your topics. Teach Students how to prepare effective PPTs
    - Cover same topic in training programme of teachers
    - To making PPTs
    - To practice of PPTs
    - Our teacher's training, trainee and our branch work
    - It will be helpful during training programmes
    - Timetable & skills

7. Where will you rate this session?

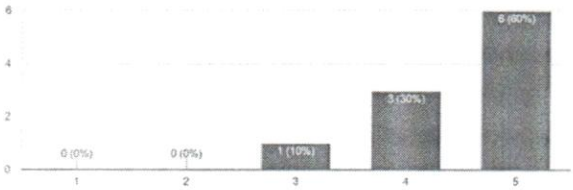


Feedback on Session 3: Introduction to web 2.0 Technology

1. Which points covered in this session?
   - Introduction to Web 2.0 technology
2. Whether this session was useful or not?

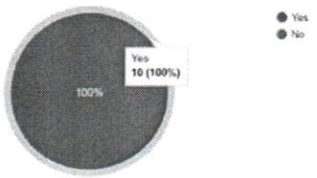


3. If yes, what are the benefits of this session?
   - We aware about web 2.0 technology
   - New information of web 2.0 technology
   - Improvement teaching learning process
   - It really helped to know the web 2.0 technologies
   - Two way communication
4. What are the drawbacks or lacuna of this session?
   - Practical work was not sufficient
5. Provide your suggestion/s for further improvement.
   - Increase the time of practical work
6. How will you implement in your teaching?
   - ICT skills
   - Helpful to create awareness about web 2.0 technology
   - To learn web 2.0 to students
   - My trainees will aware
   - We apply all this topic in our class room teaching
   - Branch work
   - As training programme
   - For student knowledge
7. Where will you rate this session?

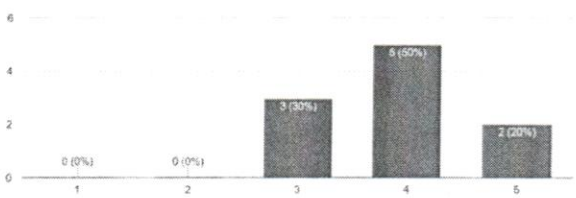


Feedback on Session 4: Educational uses of social networking

1. Which points covered in this session?
    - Educational uses of social networking
    - Use of social networking
2. Whether this session was useful or not?

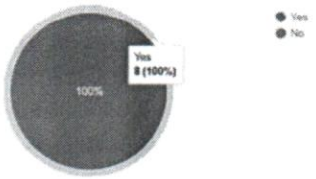


3. If yes, what are the benefits of this session?
    - We knew that how social networking is useful to develop teaching learning material.
    - We learn more about social networking
    - We become aware about advantages and disadvantages of social networking
    - Helped to know the various social networking site
    - To make education two ways
    - Making article and research work
4. What are the drawbacks or lacuna of this session?
    - More time and more practice required.
5. Provide your suggestion/s for further improvement.
    - More chance for practical work.
6. How will you implement in your teaching?
    - To get more benefits of social networking in class room teaching & share innovative ideas in education
    - To aware Teachers about use of social networking in education
    - To provide more information to students
    - On mobile take practical
    - We use this sites for sharing positive ideas
    - To guide teachers in teacher's training
    - It will be helpful in B. Ed teaching
    - Daily teaching Training process to get opinions
    - For making quality documentation
7. Where will you rate this session?

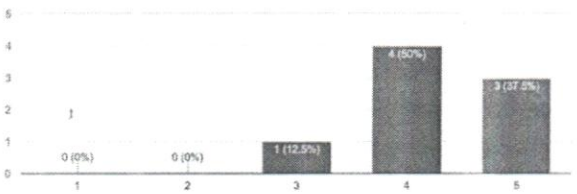


Feedback on Session 5: Creation of blog and its uses

1. Which points covered in this session?
    - What is blog? How to make it?
    - Creation of Blogs and its uses
2. Whether this session was useful or not?



3. If yes, what are the benefits of this session?
    - We can make our blog. We can put teaching learning materials in blog. We can inspire our students, just example like Jaggnath.
    - Learn about create blog
    - Blog theory
    - Creating blog
    - Very useful session for teaching
    - To get opinions and make education on web 2.0 base.
    - For personal profile and to spread knowledge
4. What are the drawbacks or lacuna of this session?
    - Could have added some other blog creation Platforms
    - Hands on training was missing
5. Provide your suggestion/s for further improvement.
    - You should provide practical session for making blog. You should also give demo how to make pages in blog and etc.
    - Give practical
    - Add some other blog creation Platforms as just examples
    - Practical work should be there
6. How will you implement in your teaching?
    - We can use it for our institute, our students and our awareness for ICT.
    - To teach students to create blog
    - In teacher training & D El Ed/B Ed trainees
    - Have been using since long in teaching
    - For opinions and to show activities on proper platform.
    - Student make their own blog
7. Where will you rate this session?

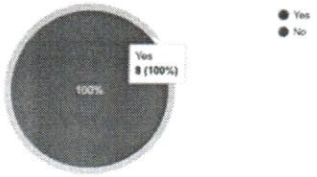


Feedback on Session 6 & 7: Movie making

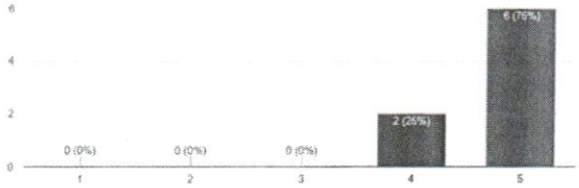
1. Which points covered in this session?

- Theory and practical of movie making
- Movie making and miscellaneous
- Software introduction and it's practical.

2. Whether this session was useful or not?



3. If yes, what are the benefits of this session?
    - To know movie making
    - Knowing more in movie making
    - Superb session. Very useful in education.
    - It helped to know the idea of creating movie using windows movie maker
    - Make your educational memories unforgettable.
    - To make content more effective
4. What are the drawbacks or lacuna of this session?
    - Give practical work on proper computer. We don't make movie.
5. Provide your suggestion/s for further improvement.
    - Install latest version in computer
    - Organise hands on session on the version u taught rather than version available
6. How will you implement in your teaching?
    - Useful to teach students
    - I will practice at diet
    - Present our work with this
    - To make short movies for effective education.
    - It is really helpful
    - Prepare such education AL movies
    - In school students will use this technique to clear content
7. Where will you rate this session?

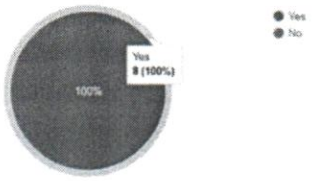


Feedback on Session 8 & 9: Collaborative work with wikieducator

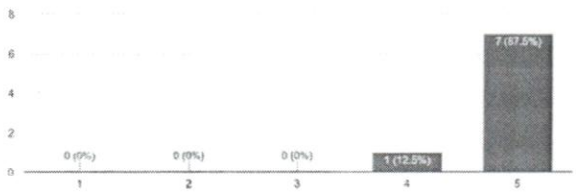
1. Which points covered in this session?
    - Use of wikieducator
    - Wikieducator and website development
    - Collaborative work with wikieducator

- How to use wikieducator with practical.

2. Whether this session was useful or not?



3. If yes, what are the benefits of this session?
   - Both theory and practical
   - Very beneficial to prepare educational materials.
   - We can work with wiki
   - It will help to create the new learning resource
   - To know benefits of wiki educator in education.
   - Prepare webeductor and chat teacher-students & educators.
   - Personal profile, personal views on current issues, collaborative work
4. What are the drawbacks or lacuna of this session?
   - None
5. Provide your suggestion/s for further improvement.
   - Practical
6. How will you implement in your teaching?
   - I develop my wiki and website
   - I can create pages on wikieducator
   - We can use in our teaching learning.
   - By creating an educational wiki
   - To provide knowledge to students.
   - Make education more qualitative
7. Where will you rate this session?



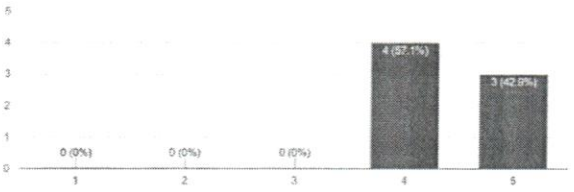
Feedback on Session 11: Multimedia Resources and Creating free Website

1. Which points covered in this session?
   - How to create free website.
2. Whether this session was useful or not?

3. If yes, what are the benefits of this session?

- It's useful for making website.
- Make free website for DIET
- It will help to create new free websites
- We can create our own website
- For personal and organisation Website development.
- Knowledge about creating free website
- Making free websites

4. What are the drawbacks or lacuna of this session?
    - None
5. Provide your suggestion/s for further improvement.
    - Enough time should be given for hands on.
6. How will you implement in your teaching?
    - It's helpful to create institute's website.
    - Guide making site by trainees & teacher
    - In training programmes
    - We can share important knowledge by website.
    - To do our website
7. Where will you rate this session?



12 Participants and Resource Persons

Training of KRPs of DIET on use of ICT in Education
12-16 February 2018

Sr. No	Name	Designation	Office Name	Phone No. & e-mail ID
1.	Gandali Halankar	Teacher Grade-I	People's Hr. Sec. School, Mala, Panaji	9921847711 gandalihalankar@yahoo.com.
2.	Manglesh S. Ghadi	Computer Teacher	Shri Vijayanand Hr. Sec. School, Tikhazen Mayem, Goa	9545506230 ghadimanglesh@gmail.com.
3.	Ximena M. Fonseca	Associate Professor	Nirmala Institute of Education	9767262900 ximenar_fonseca@yaho.co.in
4.	Suvarna P. Gauns	Associate Professor	Nirmala Institute of Education	suvarnagauns@gmail.com.
5.	Swati R. Naik Raikar	Teacher Grade-I	Swami Vivekanand VM's Hr. Sec. School, Borim, Ponda, Goa	9527026965 Swatiraikar98@gmail.com.
6.	Mrs. Mrunal Korgaonkar	Principal	Deepvihar Hr. Sec. School, Headland Sada, Vasco, Goa	9850650401 principaldvhss2014@gmail.com
7.	Mrs. Shubhla Naik	Teacher Grade-I	Deepvihar Hr. Sec. School, Headland Sada, Vasco, Goa	shunaik99@gmail.com
8.	Mrs. Irene Delaney	Teacher Grade-I	Our Lay of the Rosary HSS Dona Paula	9767701345 delaneyip@hotmail.com
9.	Vrushali Mhamal	Teacher Grade-I	Santo Minguel Hr. Sec. School, Taleigao	9145687698 mhamalvrushali@gmail.com.
10.	Priyanka E. Govenkar	Teacher Grade-I	Harmal Panchakroshi Hr. Sec. School, Harmal (Arambol), Pernem, Goa	8378900593 govenkarpriyanka@gmail.com.
11.	Shivali J. Rathore	Teacher Grade-I	PES Shri Ravi Sitaram Naik Hr. Sec. School, Farmagudi	9422505907 shivalirathore@gmail.com
12.	Lalita S. Betgar	Teacher Grade-I	PES Shri Ravi Sitaram Naik Hr. Sec. School, Farmagudi	9921920200 Betgarlalita0101@gmail.com.
13.	Cheryl B. D'Souza	Teacher Grade-I	Jawaharlal Nehru Hr. Sec. School, Fatorda	8975009913 chersky21@gmail.com.
14.	Ms. Veena S. Naik Dessai	Teacher Grade-I	Smt. Chandrabhaga Tukoba Naik, Hr. Sec. School, Curchorem	9673058104 veena.dessai@gmail.com.
15.	Mrs. Cleopatra Pinto Fernandes	Senior Teacher	Carmel Hr. Sec. School, Nuvem	9822162403 cleopatrafernandes95@gmail.com
16.	Dr. Delia Antao	Asstt. Professor	Nirmala Institute of Education, Altinho	9011545383 deliaantao@gmail.com.
17.	Pavan S. Naik	Teacher Grade-I	Dr. K.B. Hedgewar, Hr. Sec. School	beingpavan@hotmail.com.
18.	Cheryl A. Cota	Teacher Grade-I	St. Andrew Hr. Sec. School, Vasco, Panaji	9923644932 cherylann_383@yahoo.co-in
19.	Dr. Russell D'Souza	Asstt. Professor	Nirmala Institute of Education, Altinho, Panaji, Goa	8806476170 russsouza@gmail.com.
20.	Akshata Shetty	Computer Teacher	Bhatikar Model High School Gogal, Margao	9049042482 shettyvakshata@gmail.com.

21.	Seliza Rodrigues	Computer Teacher	Govt. Multipurpose Hr. Sec. School, Borda, Margao, Goa	9767658410 selizanevis@gmail.com.
22.	Ashwini Naik Dessai	Computer Teacher	SES Madhvarao Talaulicar Hr. Sec. School, Sacorda	9422846364 itsme_tejadesai@rediffmail.com.
23.	Dnyaneshwar C.F. Dessai	Computer Teacher	Damodar HSS, Gudi-Paroda	9823032644 dnyo6012@gmail.com.
24.	Sudhir S. Pai	Computer Teacher	S.S. Angle Hr. Sec. School, Mashem Cancona	9923855939 talksudhir@rediffmail.com.
25.	Rajesh Shirwadkar	Computer Teacher	Govt. High School, Pissurlem-Sattari	7798106548 rajeshshirwadkar@gmail.com.
26.	Laukik Prabhu	Computer Science/ Teacher Grade-I	GVM's SNJA Hr. Sec. School, Farmagudi, Ponda, Goa	9657439718 laukik198@gmail.com.
27.	Mr. Manohar B. Shetkar	Computer Teacher	Tagore Educational Institute, Kothambi, Pale, Bicholim, Goa	9823118348 saharsh4@gmail.com.
28.	Ankash K. Bugde	Computer Teacher	Shri Kamaleshwar Hr. Sec. School, Korgao Pedne, Goa	7038200885 ankush.b611@gmail.com.
29.	Asiambi Shaikh	Computer Teacher	St. Thomas Hr. Sec. School, Aldona, Bardez, Goa	9689560666 a_m_shaikh2003@yahoo.com.
30.	Prasad Chodankar	Computer Teacher	Sharada Hr. Sec. School, Bhendale Ozari-Pernem, Goa	7875232527 chodankarprasad5352@gmail.com.
31.	Sadashiv alias Bipin B. Narvenkar	Teacher Grade-I	MES Hr. Sec. School, Zuarinagar	8275384850 narvenkarbipin@gmail.com.
32.	Pramod Harmalkar	Teacher Grade-I	St. Alex Hr. Sec. School, Curtorim	7219889983 pramodharmalkar22@gmail.com
33.	Mrs. Neeta P. Naik	Teacher Grade-I	District Institute of Education & Training, Alto Porvorim, Bardez, Goa	9765183007/7083273733 pednekarneeta29@gmail.com.
34.	Mrs. Maria Goretti Falcao	Co-ordinator	GVM's Dr. Dada Vaidya College of Education, Ponda	9552538226 gorettifalcao09@gmail.com.
35.	Mr. Dinesh H. Cuncolienkar	Teacher Grade-I	Shiroda Hr. Sec. School,	dinesh.cun.@gmail.com
36.	Manisha B. Naik	Teacher Grade-I	Shiroda Hr. Sec. School, Karai, Shiroda, Goa	anisha29naik@gmail.com
37.	Mr. Rama M. Govekar	Teacher Grade-I	Sapteshwar Institute for Hr. Sec. Education Mandrem, Goa	9423834170 ramagovekar@gmail.com
Resource Persons				
38.	Mr. Ajay Gaude	General Manager	Goa Industrial Development Corporation, Panjim, Goa	urwithajay87@gmail.com
39.	Dr. Anand Arya	Asst. Professor in Chemistry	Regional Institute of Education, Captain D D Chaudhary Marg, Pushkar Road, Ajmer-305004	anandarya2001@yahoo.com

0.	Dr. Vaibhav Jadhav	Asst. Professor in Education	Savitribai Phule Pune University, Pune	vaibhavjadhav07@hotmail.com
1.	Dr. Sanjay Kumar Pandagale	Associate Professor in Education	Regional Institute of Education, Shyamla Hills, Bhopal -462013	sanjaypandagale@gmail.com