Macmillan Education
Digital Guide

Your comprehensive guide to digital terminology

macmillan education

3G/4G

THIRD/FOURTH GENERATION

This refers to the third or fourth generation of mobile telecommunications technology. 3G telecommunication networks support services that provide an information transfer rate of at least 2 Mbit/s, 4G has a rate of 100 Mbit/s. Telecommunication companies market wireless mobile Internet services as 3G or 4G, indicating that the advertised service is provided over a 3G or 4G wireless network.

ACTIVEX

A system created by Microsoft to enable interactive content on websites. It appears via pop-ups in web browsers. It can be used as an entry point for malicious content in computer equipment. Should an ActiveX pop-up appear when using any of our materials, you can trust this.

ADMINISTRATOR

A person skilled in computer systems who is in charge of maintenance of individual computers or a network. These technicians are usually coordinators of an Information and Communication Technology (ICT) department.

ANTIVIRUS

An application or software that searches for, detects and eliminates malicious programs in computer systems. These malicious programs include viruses, trojan horses, worms and spyware.

APP

The term by which applications or programs are commonly known. In recent times, apps for different mobile devices have become very popular. The *Pronunciation App* is an example of a Macmillan app.

macmillan education

BACKUP

The process of copying and archiving computer data.

BANDWIDTH

The amount of information or data that can be sent via a network connection in a given period of time. The bandwidth can be measured in bits per second (bps) kilobits per second (Kbps), or megabits per second (Mbps). Schools whose learners are using online materials must be aware of the available bandwidth in order to ensure the proper operation of these materials.

BIT

The most basic unit of information that can be stored in a computer. When abbreviated, it is represented by a lower-case 'b'. 8 bits make up one byte.

BLENDED LEARNING

Blended learning is a method of learning that uses a combination of different resources, for example a mixture of classroom sessions and online materials. Learn more about blended learning in our Macmillan Teacher Campus blended learning workshop. Macmillan Teacher Campus offers two blended learning workshops. One workshop for beginners and one for more advanced educators.

BLOG

A personal online diary or log written by one or more authors. In education, blogs offer great options for learners as part of digital projects.

BLUETOOTH

A technology that allows wireless data transfer between two devices over a short distance.

BROWSER-BASED

Content that is accessible within a web browser, rather than content which is distributed as software and installed on the user's computer.

BUFFER

Temporary memory space in a digital device (computer, mobile telephone, tablet, PC etc.) used as storage between the device and the Internet. For example, it is used to stream audio or video online without losing quality, as it stores the content in advance.

BUG

A computer code failure in a program that prevents it from being run or viewed properly. When devices or software are updated, bug-fixes are usually applied.

BYOD (BRING YOUR OWN DEVICE)

The practice of allowing educators or learners to bring their own computing devices to school, college etc. and use them on the organisation's network for learning and teaching.

BROWSER

A computer program that allows you to look and search through information on the Internet. The most commonly used browsers are Google Chrome, Microsoft Internet Explorer, Mozilla Firefox and Safari. Although their main function is to provide the user with a portal to the Internet, browsers can also be used to launch other programs, such as *Macmillan Talking Stories.*

BYTE

The next unit of measurement following the bit. One byte equals 8 bits. When the two words are abbreviated, byte is represented by an upper-case "B", while bit is represented by a lower-case "b".

CACHE

An automatically stored copy of a website page when it is visited for the first time, The browser starts this process so that it does not have to access the same data continuously when someone revisits the same website.

CAPTCHA (COMPLETELY AUTOMATED PUBLIC TURING TEST TO TELL COMPUTERS AND HUMANS APART)

A captcha is a program used to verify that a human, rather than a computer, is entering data. Captchas are commonly seen at the end of online forms.

CLOUD COMPUTING

Computer programs or applications that allow users to publish, edit and maintain content and data without the need for them to store the information on their own device. The information is stored on offsite servers which are accessed via the Internet. The

implementation of cloud computing is growing due to the speed of access to software without the need for local installations. Google Docs is an example of cloud computing.

CMS (CONTENT MANAGEMENT SYSTEM)

A computer programme that allows the user to publish, edit and maintain content as well as data. Examples of common CMSs include WordPress, Joomla and Drupal.

CONTENT CURATION

The process of collecting, organising and displaying information relevant to a particular topic or area of interest. Popular content curation websites include Facebook, Pinterest and Paper.li.

COOKIE

A small file placed by a website onto an individual computer. Its function is to collect information on how the user is accessing the Internet, which can be used to make the browsing experience simpler and better.

CPU (CENTRAL PROCESSING UNIT)

The computer's central processing unit is where all the program operations and instructions take place.

CROSS-PLATFORM

Also called Multiplatform. Refers to computing methods, programs, programming languages and software that can function on multiple computer platforms. When publishing digital content, the aim is often to ensure cross-platform accessibility, so that as many users as possible can access the content.

DOMAIN NAME

A unique Internet address, for example www.macmillan.co.za.

DONGLE

An electronic device or piece of hardware that must be connected to a computer port to allow access certain applications.

DOWNLOAD

The process of transferring a file from a website, server or removable storage to a user's computer.

DRIVER

Programs that serve as controllers to manage the operation of secondary devices connected to a computer. These devices can range from an interactive whiteboard (IWB) to a printer.

DRM (DIGITAL RIGHTS MANAGEMENT)

A set of technologies used by copyright holders to prevent the copying, altering, or illegal distribution of their content, software, or devices. Also called copy protection or copy prevention.

DSL (DIGITAL SUBSCRIBER LINE)

A communications medium used to transfer digital signals over standard telephone lines. Along with cable Internet, DSL is one of the most popular ways Internet Service Providers (ISPs) provide broadband Internet access.

CYBERSAFETY

Cybersafety is the safe and responsible use of Information and Communication Technologies (ICT).

The number of children with access to the Internet continues to grow worldwide. Cybersafety is a growing concern for both children and adults. Macmillan Teacher Campus cybersafety workshop is designed to make educators aware of the dangers and guide them in teaching learners about cybersafety in a fun and exciting way.

Please scan this QR code to learn more about the Cybersafety workshops by Macmillan Teacher Campus.

ECOSYSTEM (OR DIGITAL ECOSYSTEM)

A community of digital devices and their supporting structures (such as hardware, software, and services) functioning as a whole. Companies such as Microsoft, Apple and Google try to create user ecosystems of their own to increase loyalty to their brand.

ENCRYPTION

The processing of data contained in a file to prevent anyone, except the intended recipient of the file, from reading or changing the data.

E-READER

A reading device which enable users to read digital content. Some of the well-know e-readers include miEbooks, Snapplify and Vitalsource.

FIREWALL

A security program designed to block unauthorised access to a computer while allowing authorised communications at the same time.

FLIPPED CLASSROOM

A form of blended learning in which learners prepare for a lesson in advance or in groups after school. The learners can then be assisted in class with the content that they specifically struggled with instead of the teacher taking time to teach new contet.This approach allows educators to spend more time interacting with learners instead of presenting.

DIGITISING

The process of converting an analogue object, e.g. a book or photograph, into its digital representation.

At Macmillan Education South Africa, all resources such as textbooks, study guides and teacher guides are available in digital format.

FTP (FILE TRANSFER PROTOCOL)

A set of rules enabling users to transfer and store files between systems connected to the same network.

GIF (GRAPHICS INTERCHANGE FORMAT)

An image file format commonly used for images on the web and sprites in software programs.

GPS (GLOBAL POSITIONING SYSTEM)

A satellite navigation system used to find the position of an object on the ground.

HACKER

A person who breaks into a device or network and tries to access protected areas and content.

HARDWARE

The physical parts of a computer or digital device.

HTML (HYPERTEXT MARKUP LANGUAGE)

The most common computer language used to build web pages.

HTML5

The latest revision of the HTML standard computer language used to build web pages, as of December 2012.

HTTP (HYPERTEXT TRANSFER PROTOCOL)

The most commonly used transfer protocol on the Internet that transmits information between a server and another computer or server.

HTTPS

A version of HTTP that certifies that a data transmission is secure. Important when accessing confidential or protected material such as making purchases or moving money online.

ICON

A digital image on a screen representing representing a specific action to be performed, like running a program, opening a file, printing a document or viewing a folder.

ICT (INFORMATION AND COMMUNICATION TECHNOLOGY)

The ecosystem which allows modern computer processing. Educational ICT has enhanced teaching and learning in the classroom. Examples would be interactive whiteboards and data projectors.

IN-APP PURCHASES

The option to purchase extra content or enhancements from within a digital application. These may be further levels of a game or alternative versions of a dictionary for example.

INTRANET

An internal digital network of an organisation or school.

IP ADDRESS

A unique digital address (string of numbers separated by full stops) that identifies a device on the Internet or a local network. It allows a system to be recognised by other systems connected via the Internet protocol.

ISP (INTERNET SERVICE PROVIDER)

A company that provides customers with a connection to the Internet.

IWB (INTERACTIVE WHITEBOARD)

A electronic whiteboard connected to a computer and a video projector which shows the image of the connected computer screen. The Interactive Whiteboard allows the user to perform demonstrations on the screen as actions are controlled via the screen.

JAVA

A computer programming language developed by Oracle to create applications that can be exported to the Internet, capable of operating on any platform (usually web browsers).

JPEG

A commonly used method to compress digital images, particularly for those images produced by digital photography. The degree of compression can be adjusted, so that the user can decide if they want to keep the image quality or rather have a smaller file.

LAN (LOCAL AREA NETWORK)

An interconnection of several computers and other devices at the same site. It is most commonly used to interconnect devices in offices, factories etc. to share resources and exchange data and applications.

LEARNING PLATFORM

A set of interactive services, generally online and with restricted access, designed to provide educators, learners and parents with tools and resources to support educational delivery and management. Some platforms are free (e.g. Moodle), while others are paid for services.

LTE (LONG-TERM EVOLUTION)

A standard for high-speed wireless communication for mobile devices and data terminals, based on the GSM/EDGE and UMTS/HSPA technologies.

MAC (MEDIA ACCESS CONTROL) ADDRESS

A MAC address is a hardware identification number that uniquely identifies each device on a network. The MAC address is manufactured into every network card, such as an Ethernet card or Wi-Fi card, and therefore cannot be changed.

METADATA

Metadata describes other data. It provides information about a certain item's content. For example, an image may include metadata that describes how large the picture is, the color depth, the image resolution, when the image was created etc.

MOOC (MASSIVE OPEN ONLINE COURSE)

A course of study offered over the Internet which is free and has a very large number of participants. Futuerlearn and Coursera are examples of technology companies offering MOOCs in association with various universities and industry experts.

MP3

An audio compression format, widely used on the Internet. An MP3's sound quality is very similar to that of a CD. MP3 players refer to devices that can play this audio format.

MP4

A compression format that can contain both audio and/or video. MP4 players refer to devices that can play this audio and video.

MPEG (MOVING PICTURE EXPERTS GROUP)

An organisation, which works with the International Organization for Standardization (ISO), which develops benchmarks for digital audio and video compression. The group constantly works to develop more efficient ways to digitally compress and store audio and video files.

OPEN SOURCE

Computer code that is available for anyone to use, generally for free. Open source promotes worldwide access to a product's design, and worldwide redistribution of that design, including ongoing improvements to it by anyone.

OS (OPERATING SYSTEM)

The software in charge of running all the hardware and other software on a computer or mobile device. Windows, Linux and Ubuntu are examples of desktop operating systems. iOS and Android are examples of mobile operating systems.

PIXEL

The smallest unit of an image or video frame. A cell with a specific colour and/or brightness. The more pixels in an image, the greater the detail with which it can be displayed.

PLUG-IN

Applications that link to others in order to provide them with a new, generally specialised function. (These additional applications are run by the main application).

PNG (PORTABLE NETWORK GRAPHICS)

A visual format application which allows Web developers and icon designers to fade an image to a transparent background rather than a specific colour.

POP-UP

A window that automatically "pops up" on a computer screen when accessing a webpage or website that has not been called up by the user. Browsers have tools for controlling pop-ups, although these pop-up blockers often prevent proper website operation.

PORT

A connection point on a computer to which different devices are connected. A USB port is the most common type of port.

RAM (RANDOM ACCESS MEMORY)

A part of the computer memory. Data is stored and transferred though this memory while a user works on a device. The amount of RAM a computer needs varies widely depending on the applications being used.

QR (QUICK RESPONSE) CODE

A type of 2 dimensional (2D) bar code that is used to provide easy access to information through a mobile device.

This QR code links to our website. To put it to the test, download and install a QR scanner on your mobile device and use it to scan this QR code.

ROUTER

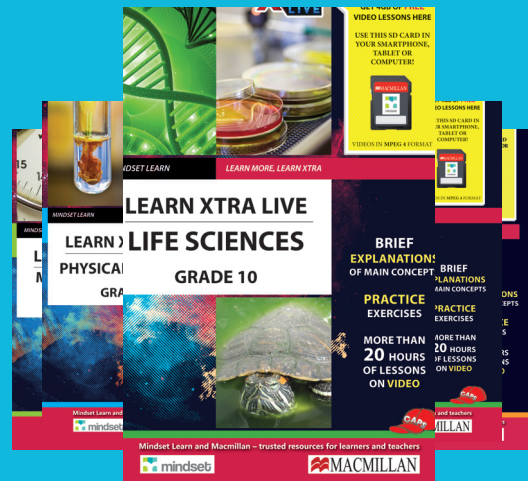Hardware that ensures the connection between two or more networks.

SCREEN RESOLUTION

The number of pixels used to set up the display of data in any type of monitor (computers, latest-generation telephones, etc.) The resolution is measured in width by length.

SEARCH ENGINE

A website or program that performs web searches based on related words and offers a series of results. The most commonly used search engine is Google.

SD (SECURE DIGITAL) CARD

A type of digital memory card used for storing data in devices such as digital cameras, PCs and mobile phones. Macmillan's *Learn Xtra Live* study guides come with SD cards loaded with 20 hours of video footage that help learners to study anywhere, anytime on their phones, PCs or tablets; making revision fun and engaging!

SERVER

A computer used to provide digital storage space and resources to other computers (called clients) connected to it via a network.

SOFTWARE

Different types of programs used on a computer. They are the logical tools used by a computer, as opposed to the system's physical components, known as hardware.

SOCIAL NETWORK

Online social groups of people connected either by different relationships (such as family, friends or colleagues) or common interests (such as hobbies). Their main feature is the quick communication and the ability to access recipients worldwide.

The most popular social networks are Facebook and Twitter.

Connect with Macmillan Education on:

Facebook: MacmillanSouthAfrica

Twitter: @MacEDsa

SPAM

Unsolicited email messages, usually of an advertising nature, sent to a large number of users. Spam can be sent to scam users or spread viruses.

STREAMING

The process of transmitting and receiving data (generally video and audio material) over the Internet as a steady continuous flow. This allows the user to access the data without the need to download it to their own device.

SQL (STRUCTURED QUERY LANGUAGE)

A query language used for accessing and modifying information in a database. It is commonly used for Web database development and management.

TABLET

A mobile device with which users normally interact via a touch screen. Users can use a pointer or their own fingers to work with such devices without needing a physical keyboard or mouse. The most popular tablet devices are Apple's iPad, Samsung's Galaxy tablet and Google's Nexus tablets.

UI (USER INTERFACE)

The digital tools at which a user communicates with a computer program, by selecting from commands, the pop-up menu, windows, or icons to make the program do what you want.

URL (UNIVERSAL RESOURCE LOCATOR)

The address of a World Wide Web page.

USB (UNIVERSAL SERIAL BUS) PORT

A port that can connect other devices to a computer. They can be connected and disconnected while the computer is running, without needing to install drivers or restart devices.

VGA (VIDEO GRAPHICS ARRAY) CONNECTOR

A port for linking devices such as screens and projectors to computers.

VPN (VIRTUAL PRIVATE NETWORK)

Extends a private network across a public network and enables users to send and receive data across shared or public networks as if their computing devices were directly connected to the private network.

WAN (WIDE AREA NETWORK)

An interconnection of computers and other devices which can be done across several sights.

WEBINAR

A talk or demonstration on a subject given over the Internet allowing a group of people in different places to watch, listen and sometimes interact with the speaker.

WEBMASTER

The person responsible for managing the content and structure of a website.

WIDGET

A small application or program that provides easy access to frequently used functions and provides visual information. These include on-screen clocks, notes, calculators, agendas, etc.

WIRELESS

A communication media which accesses airwaves to transfer data without the need of cables between devices.

WIFI (WIRELESS FIDELITY)

The benchmark for the operation of wireless networks. It enables one or more systems to connect to a network. It can be public or private (password-protected.)

WIKI

A Web page created with input from many different users. Users do not need to have any programming knowledge. Users can create, edit, or delete a text being shared by all other users. The best-known example of a Wiki is the free encyclopaedia, Wikipedia.

WWW (WORLD WIDE WEB)

The most common hypertext-based information distribution system. Using a browser, a user views sites comprised of pages that may contain text, images, video or other multimedia content. Users browse them using links.

ZIP

Action of packing or compressing one or more files from a single file so that they take up less disk space and require less time to be transferred via a network. There are many compression programs, the most widely used are Winzip and WinRar.

CONTACT US

For more information and details of our products, visit
www.macmillan.co.za
or email **info@macmillaneducation.co.za**

Tel: +27 (0) 11 731-3300
Fax: +27 (0) 11 731-3535

Physical Address:
4th Floor, Building G, Hertford Office Park,
90 Bekker Road, Vorna Valley, Midrand, 1685

macmillan education