## ICT used today!!!

We live in an age where vast amounts of information pass from one side of the World to the other in seconds. At home, at school, at the office, even in the streets, we are bombarded with a dazzling variety of information, which is right at our fingertips *IF* we know how to use it!

The important issue closely related to working with ICT is how to use it effectively. The majority of ICT equipment, especially modern computers and software, are expensive and as all schools have limited recourses, it is important to use them effectively to provide the best possible ICT teaching. It is much more efficient to use a class set of graphic calculators with special OHP calculator used by the teacher than just one or two PC per class, which would be comparable in price. There is an opinion that the future in using ICT in teaching mathematics lies not in using computer classes but in using interactive whiteboards in every lesson. Personal computers are excellent resources but by their very nature they are best used for individual independent learning, not in class situation. In my experience in working in computer classes the teaching plans had to be adapted in such way that the pupils could follow instructions on the specially prepared worksheets individually.

There are many different ways that ICT affects our everyday life here are some examples.

ICT has the potential to make radical changes in the links between home and school. The huge increase in home-based computers and the ability of people to access the web from the comfort of their own PCs has created new possibilities for ICT to increase opportunities for pupils to extend learning beyond their schools' walls. It is not just extended classroom-based tasks using ICT that can contribute to the developing links between home and school. Some games, for instance, are known to have educational benefits as they develop skills.

The Internet is a network that links other networks of computers, and allows them to exchange information around the world. Internet technologies make use of the Internet. These technologies were created to facilitate better communication across vast areas. Internet technologies include:

World Wide Web (WWW)

E-mail

Multimedia

Encryption

Internet connections are technologies that provide access to the Internet. These technologies have allowed both organisations and home computer users to join/access the Internet. Internet connections include:

Modem

**ISDN** 

**ASDL** 

Broadband

Mobile telephone technologies have developed rapidly over recent years. The phones and the functions have become more advanced. Some phones even allow access to the Internet through a computer or directly. Mobile telephone technologies include: SMS WAP

Currently television is broadcasted using an analogue signal, but the analogue signal is due to be cut by 2010. This will mean television pictures will only be available on the digital network. Digital broadcasting allows more information to be transmitted at a faster rate, improving the quality and quantity of the services provided. A digital network will also allow a whole host of services to be carried together on the same circuits – telephone, Internet, television, etc. Digital television can be interactive, for example playing games and communicating.

Personal Digital Assistants (PDAs) and organisers are small hand-held computers and they have evolved rapidly and continue to do so. They can be used for keeping diaries, an address book, making notes and sending and receiving e-mails. Most PDAs use touch screen technology and can be linked to a PC. With links to a telephone network, PDAs allow network computing anywhere and at any time.

Storage media allows data to be saved and used again. The types of storage media available have increased rapidly over the past few years. Magnetic storage media, such as floppy discs, has been gradually taken over by other forms such as CD's, which allows greater volumes of data to be stored. This type of technology is developing even further, with media such as:

DVD Minidisk

Touch screen technologies allow options/menus to be selected at the touch of the screen. On touch sensitive screens there are criss-crossing beams of infra-red light just in front of the glass. When the screen is touched and the rays are broken and the computer detects the position of the finger. This technology is seen in a wide variety of areas. For example electronic tills, video games, ticket ordering, etc.

Computers are now used in almost every aspect of daily life. It would be virtually impossible to carry out every day activities if the technology were to be removed. The availability and the cost of technology, home computers and Internet access, means that more and more people have a PC for home use. It is important to understand how this technology works in order to recognise the affects it has on the quality of life.

One aspect where we can see this effect is in the development of on-line services, allowing business customers to shop, bank and investigates products and services from home with a click of the mouse.

Online Shopping

A number of businesses in order to attract more customers provide facilities for shopping on-line. With varied working hours, 24-hour access to an Internet shopping facility and home delivery can appear highly attractive to someone that finds it difficult to get to the shop in person.

## Online Banking

ICT is used in banking in three main ways – processing cheques, operating ATMs and it allows home banking. Home banking uses the Internet or telephone to give the customer access to their bank accounts 24-hours a day. It allows people to make payments and transfer funds at any time, again making it more convenient for the customer. Tesco have even made it possible to send text messages to the mobile phone of their customers, to let them know how much there bank account holds.

Comparing Products – Travel, Financial Services and Online Auctions

Another aspect is that such technology has allowed the customer to search for a product and the prices from a variety of businesses, whether it is finding a holiday, a pension or visiting an auction online. It reduces travel and the time spent by the customer when weighing up their options.

ICT has allowed businesses to offer and provide more specialised, technical services that help their customers personally or professionally.

They can design and construct a customised database for the business, making their operations run more efficiently and effectively. For example, BT's directory enquiry service makes use of a database whether you ring them up or access it through the Internet.

Another aspect is regarding the security side of a business's operations. Security could refer to the security of their network or their premises and ICT can be used to protect either. Hardware and software has been developed to provide state of the art security systems making the information or premises more secure.

Call centres deal with a wide variety of issues. For example they could be a customer help line or where a customer can order a product. With ICT having a direct influence on the telephone network, this allows businesses that run call centres to process a greater volume calls. Once a call is taken, the operators have access to a workstation that means they have access to their business database and can deal with the customer efficiently.

Customer enquiries could be dealt with at a call centre or many businesses with a web site have a link where you can e-mail them with your enquiry.

Marketing is about getting the potential customer to buy your product, a product that the customer wants. Advertising is linked in with marketing. Advertising is any message about itself or its products or services that the business has paid for.

There are 4 main reasons why businesses advertise. These are:

To make consumers aware of new products
To remind consumers about existing products
To persuade consumers to switch from rival products
To improve the image of the business

All this leads to the business ultimately wanting to sell more of its product or service.

CD players and Walkmans are becoming a thing of the past as MP3 players and minidisk players are breaking through head to become number one.

## ICT USED IN SCHOOLS

Interactive whiteboards enable teachers to demonstrate and not have their backs to pupils. Touch screens can be used in education centres, not necessarily just in schools. Tests should be completed on touch screen computers because they will also tell you how much time you have left and they allow you to change an answer as many times as you like. It will record the answers you give. They use these on driving theory tests.

ICT can affect the place where you work because with e-mail and Intranets you can work from home. The pupils could use distance learning. This is also available for adults who enrol on Learn Direct courses. Also, working from home is convenient because you can change the hours you work, and where you work to what is more comfortable for you. This benefits you because your stress load will decrease because you can e-mail work to the person in charge. This would be useful for someone who is unable to attend school/college and needed to make up the work with homework assignments because they can e-mail the completed work to the teacher. Although, working from home would cut off contact with people you see everyday at work. Learning in school means people have advantages when they go into work, e.g. having word processing skills means people need less training in basic skills. Teachers can carry around mobile phones and laptops to keep in contact with other colleagues when they are not at work because they are on courses. Students can type up homework, coursework and revision notes. They can research on the Internet. They can also back up pieces of work, and if the first version was lost, they could retrieve the backup copy and continue to work from that. They can also carry between home and school, this dramatically reduce the amount of paperwork the pupils have to carry to and from school. Although, they must remember to take care of the disk and not subject it to extreme heat (by putting it near radiators) or magnets because they could destroy the disk. Teachers will need to restrict Internet usage and put filters on offensive pages. This prevents them from being shown to students. The Internet can be useful for student's work and revision, e.g. finding past exam papers. Although using copyright material is illegal, security is not always good on the Internet because people can hack into the Internet and find anything. Using computers for a long period of time can have health risk: radiation, backache,

wrist pain and eyesight.

The codes and practise rules must be identified for use with software, for example, the copying of software is illegal (computer misuse act). Schools admin systems and files to prevent damage to files, and the anti virus program needs to be updated regularly

because viruses are being updated. There are many viruses that can be transferred to your computer by:

- · E-mail attachment
- · Floppy disk
- · CD ROM drive

## · Off the Internet

Ted Attikons has ADD (Attention Deficit Disorder) and he also has a Psychiatric disability, this means he cannot sit calmly and do a set task, a psychiatric disability (or mental illness) can develop at any age and is often apparent to other people. Psychiatric disabilities are often the most misunderstood disabilities in the community, and peoples' attitudes are often based on prejudice and myth (e.g. schizophrenics are potentially violent). Mental illnesses can include stress-related conditions, major depression, bipolar disorder (formally called manic-depressive illness), anxiety, and schizophrenia. Depression is the most common non-psychotic mental illness (psychosis being a disorder which features the loss of contact with reality). The causes of different mental illness are not clearly understood, but they are often linked with genetic and environmental factors.

He cannot talk or walk, and communicates in different ways, he waves and use sign language, but the kind he uses is when playin charades, he under stands everything that is said to him, he depends on a wheelchair that is hooked to a touch system, this allows mobility, he also uses a touch system to communicate to his helpers



This is the touch system, is the one that is



hooked to his wheelchair.

This helps everyone around him hear what he is saying, with a touch of his finger, this is ICT at its best, as I described earlier the touch systems use infra red to cover the screen and when you press on the screen you stop the infra red



