How I use ICT at Home and in School?

How I use ICT at Home?

Demographics

I am a 16-year-old boy who lives in London. I am of background. I live in a borough that is a developing area and a borough that is full of people from all different ethnic backgrounds; a lot of people in the borough now use computers for whatever reason. As the bid for hosting the 2012 Olympics goes on, Newham is one of the hosts and for this reason the borough is advancing a lot in terms of technology to win the bid from other more advanced cities around the world.

Mobile Phones

I use ICT at home in different ways, I use different sorts of technology. Like I use a mobile phone to communicate with family and friends. I use it to communicate by sending messages and phoning other people. I send messages by typing the message from the phones keypad, which then I enter, the preferred number after that the message is sent. When phoning someone the call connects to the network provider (e.g. T-Mobile, Virgin) that connects to the person you are calling. As you call that person the credit you have in the phone decreases every minute because the network provider charges you for using that service. Credit can be put on the phone by giving the retailer a top-up card and the amount you want to credit your account. This is done by swiping the top-up card through a device which sends a message to the network provider and then within seconds your account would credited with the amount you paid with. Phones are used by satellite signals sent from your phones which are sent to a satellite which receives it which than is sent to the person receiving it and all this is done within seconds. On mobile phones you can also get WAP (Wireless Application Protocol), this is equivalent to the internet but on your mobile phone, you can do most things that you can on the internet. On WAP you can also view your hotmail account and email your contacts.

Fax Machines

In the house I use a fax machine to send documents to companies and to people abroad. Fax Machines can send documents instantly anywhere around the world. It is connected to the phone line. Even with email it is not possible to run a business without a fax machine. A small sensor in the fax machine senses everything on the paper. It scans the whole paper and sends it to the other end. At the receiving end there is a rotating drum mechanism and some sort of pen to mark the paper. A small

fluorescent tube lights the paper so that the sensor has clear view. The white space on the page the faster it will transfer so therefore if there is less white space than it will take more time to transfer. Faxes are sent to every corner of the world. It transfers the document all through the phone line. The same process would take place when you receive a fax.

Internet

I use the Internet at home to do all sorts of different things such as check my email account for any mail and to communicate with family and friends. I use MSN Hotmail and Yahoo mail. I use these accounts to stay in touch with all of my contacts and for any other reason that would occur. Email works by showing you the new emails that you have received with the subject of the email, the date and time and who sent it. To view the message you have click on the subject of the message and then the message would come up. You can create new messages and put in the email address and type in the subject and the main body of the email. Some email clients like Yahoo and Hotmail let you attach files to messages than lets you send them and you can save the attachments that are sent to you.
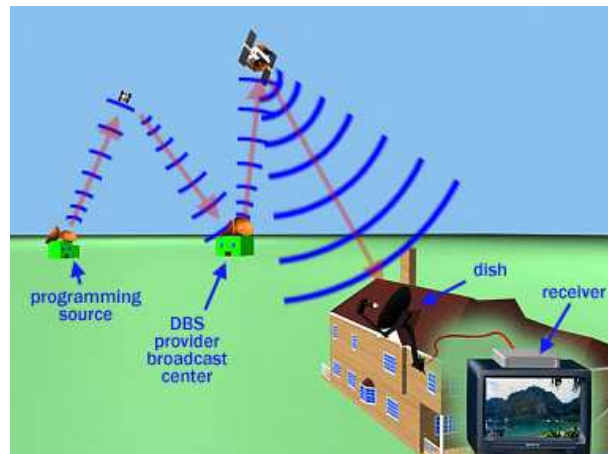
I use the Internet to search for anything that I need that I am looking for. On the Internet you can search for anything from A to Z, you can search for anything from sites to images using the different search engines available su ch as Google.com, Yahoo.com, Ask.co.uk, and many more. Internet search engines are special sites on the World Wide Web that lets you search for specified information that you searched for. There is a difference in the ways various search engines work, but they all perform three basic task. They search the Internet based on the words you type in. They keep an index of the words they find and where they find them. They allow users to look for words or combinations of words found in that index.

I use the Internet to revise for school subjects such as Science, Math and P.E and Sociology. I revise a lot online on websites such as www.bbc.co.uk/bitesize, on this website there is a lot of revision notes for all the sub jects and it covers all the topics done at school. There are different sections for all the levels of schooling such as KS2, KS3, GCSE and A-levels. This site has many links such as online help and revision notes and notes for teachers for all the subjects. You can also play educational games on this site.

Sky Digital

I use sky digital in my spare time to watch some television, I watch different channels such as sports channels, news and documentaries. Occasionally I watch some cartoons and comedy channels such as Trouble, Sky One and various other channels. On the Sky digital there are approximately 1000 channels to choose from. You can also listen to live radio stations on Sky. Satellite television is a wireless system for

delivering television programming direct to the viewer's house. Both satellite television and broadcast television transmit programming through a radio signal. Broadcast stations use a powerful antenna to transmit radio waves to the surrounding area so viewers can pick up the signal with a much smaller satellite (bowl shaped antenna). Satellite television transmits signals from satellites orbiting the earth. The provider selects programs and broadcasts them to subscribers as a set package, which they pay for. Basically, the provider's goal is to bring hundreds of channels to your television in a form that approximates the competition. Unlike earlier programming, the provider's broadcast is completely digital, which means it has much better picture and sound quality.

With the Sky Digital system you get a card that enables you to watch the satellite channels. The card contains a little gold chip, which allows you to watch only the channels that you subscribe to in your package and it will block the channels that you are not subscribed to.
Sky digital have also got an 'interactive' service where you can play games, do shopping, order movies and also order pizza. You can shop for anything from jewelry to holidays, cars to shopping for groceries at Tesco's supermarket. For the interactive service you have to be connected to a phone line. For this service you get charged and so when you receive your Sky digital bill you get charged for using the interactive service.

DVD Player

I use a DVD player to watch films that are on a CD (Compact Disk). The DVD player reads disks by a laser built in the player. The DVD player gives off signals so that the remote can receive the signals and the audience will be able to change what they are watching or skip through the film quicker than a cassette player.
A DVD is similar to a CD but it has a much bigger capacity. The DVD has a laser beam just like a normal CD player that reads the bumps on the surface of the disk. The DVD player has the job of finding and reading the data stored as bumps on the DVD.

Depending on how small the bumps are the DVD player has to be exceptionally precise piece of equipment. The drive consist of three components:

- A drive motor
- A laser and lens system
- A tracking mechanism

On the DVD player you can skip to different chapters within seconds and you can have different language subtitles on most DVD's.

MP3 Players

I use MP3 players to listen to music when I am on the move like going for a jog or going to school. MP3 players are small and compact and you can stor e up to two hours of music on the MP3's smart card. The one I use is a Panasonic SD player. It is a digital audio player that supports MP3 and AAC formats. To enable me to attach music files to the audio player I have to connect the card reader through the USB (Universal Serial Bus) port and I need to use the Real Jukebox software.
The MP3 format is a compression system for music.

How I use ICT in School?

I use ICT in school a lot more than I use it at home but in school I use for th e purpose of schoolwork and the Internet. I use the computers in school for schoolwork for most of my subjects. I use a variety of programs, which depends on what I am doing. I use the Microsoft package, which consists of Microsoft Word, Excel, PowerPoint, Access and Publisher. I use these programs for different reasons like Microsoft Word, which I use for word processing of documents such as coursework's, letters, reports and other documents for English, Science, Sociology and ICT. Microsoft Excel is used for spreadsheets, producing graphs and other forms of statistics. I use Excel in Math's and ICT to do coursework and do certain calculations and make graphs for the calculations. I use Microsoft PowerPoint to produce presentations and slide shows, which I use to present my work. I use this software mostly in ICT. In PowerPoint you can use all sorts of things like animated pictures, moving text and many more things to make it look attractive and good. I use Microsoft Access to input any data in a table with other sets of information. I use Access to create tables for data entry for all sorts of things e.g. Hire shop, Customer Details and other sorts of tables. I use Access also to query anything in the tables that I need to know just by clicking on 'Design Vi ew' and typing my search in the correct column for my search, also I use it to produce Data Entry forms and Reports. I use Microsoft Access only for one subject, which is ICT. I also use Microsoft Publisher to publish leaflets for advertisement and notices . I also use it to create business cards, business letters, letterheads, greeting cards, certificates and other useful things.
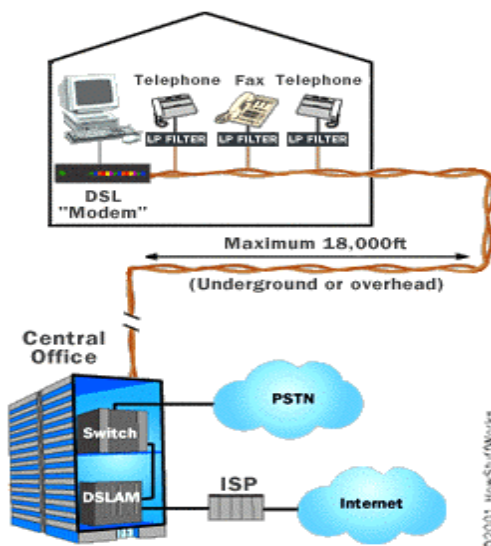
For different subjects there are different programs available such as for science, there is a whole set of programs that we use to do our experiments on (simulations). It is a quicker way of doing experiments and investigations as it is saving time and the mess it would make if we had the actual experiment done in class. For PSCHE, there is a program called Kudos, this program helps us to plan our future and our career. The program has got information on anything you need to know about any job title in any industry or sector. The way the program works is, it asks you questions on different topics about yourself and then it puts toge ther all the best jobs or careers suitable for you, according to your answers to the questions. But the most used program around the whole school is Microsoft Word. Everyone across the whole school uses this program to do all different things such as cours ework, essays, reports, letters, memo's, newsletters, printing graphics(pictures) and so on.

To allow myself to use the school computers I have to access the computers by a user-number and a password that I had set when I had joined the school. I can t hen access my user area whenever I'm in school. I can logon to any computer in all the different departments in school. It allows me to logon to any computer in the school because all the computers in the school are linked to a server. The server carries a ll details and information of all the students in the school. All our work that we do on the computers can be stored and saved on the server.

Internet

I use the Internet in school as well. In school I use it for schoolwork and to do research for most of my subjects. I use websites such as www.bbc.co.uk/bitesize, www.google.com, www.howstuffworks.com, for any information that I need to research. I use search engines such as www.google.com and www.ask.co.uk, to search for things on the Internet. A search engine is an Internet programme, which finds information that you require on the Internet by looking for words that you have typed in. The search engine searches the World Wide Web and so it will then give the results to your specific query. In school I check my mail as well, I use www.hotmail.com and www.yahoo.com. I also use these email accounts to send work home and vice versa. This is done by attaching files on the email and sending it to your own email account. You can send up to 10 megabytes of files to your email. Once you attach a file, the virus software used by the email account scans the file for viruses and it will only let you attach files that are free of viruses and it will display a short message if there is a virus to warn you. The same process takes place when you want to download the file. This process helps me a lot as I have access to the Internet at home so I can just download the file and complete my work. This is timesaving and space saving because with a floppy disk, if it is a large file it might not fit on one floppy disk and then you'll need more than one floppy disk. This also helps because I can backup my files in case they go missing or the servers at school get damaged or viruses invade the school system.

The Internet at school is connected to ADSL(asymmetric digital subscriber line) modems, which means it is broadband ten times faster than dialup.

The school has a very strong firewall; a firewall is a program that's stops people accessing a computer without permission while it is connected to the Internet. Therefore this program protects the school from hackers to steal or destroy any files on the school system. This complies with the data protection act because it has

to keep records of all students private and inaccessible from anyone outside the school.

Printers

I use printers to print any coursework and any other work. I mostly use the printer for ICT. The school uses Laser jet printers. They use these printers because they are fast in printing out your work. Static electricity is the main part at work in a laser jet printer. Static electricity is an electrical charge built up on an insulated object e.g. balloon or your body. Since oppositely charged atoms (-negative, +positive) are attracted to each other. The laser printer uses this as temporary glue. The main component of the printer is the photoreceptor, a revolving drum or cylinder. The drum assembly is made out of highly photoconductive material that is discharged by light photons. After the pattern is set the laser printer coats the drum with positively charged toner, a fine black powder. The image is electrostatic which has a stronger negative charge than the developer beads, so the drum pulls the toner particles away. It is cost efficient as well.

Around the School

There are lunch card machines around the school so you can top up your card, which will enable you to go lunch. You first insert your card than you put in the amount you want to put in the card, then you press the button and take your card out. After you get to the check out point in the dinner hall the cashier takes the money off your card by inserting it in a cash register like machine that will take charge your account.