

## **Unit 3(c)**

### **The impact if ICT on a person with special / particular needs.**

For this report I have researched Yukomi Lee Chong. Yukomi Lee Chong is the personal assistant for the director of education in Brent council. Two years ago he had a stroke which had a huge impact on his life as he had to take some time of work. The stroke resulted in a loss of control with his fingers and a slight loss of control in his wrist. The effects of this was bad and meant that he couldn't actually clench his fingers together could move his hand about. Not only did this have a huge impact on his on his work but it also had a huge impact on his home and social life. When Yukomi Lee Chong first became disabled it took him a while to get used to ways of coping with this.

The work he did at the council required him to use a computer very often in typing up letters minutes for meting and also I take minutes during the meeting after his stroke his employer and himself had to work out ways of performing his duties so that he could continue with his work as effectively as possible.

Unfortunately the stroke left him with little control over my right hand and because he was right handed he had to learn to use my left hand for simple thing like opening doors or switching on, lights. Another main problem his disability causes was when he had to use the telephone and especially difficult to use mobile phones this meant that he had to learn to use his left hand much more effectively.

His personal life involves the use of the computer to chat to friends abroad and to join in on chat room s about things he's interested in like computers and politics. He generally stays in touch with my friends using the mobile phone and also by using email so they can arrange night out. Despite having a stoke he still has a very active role in the family.

#### **Trackball**

A trackball is a pointing device consisting of a ball housed in a socket containing sensors to detect rotation of the ball about two axes similar to an upside-down mouse, but with a bigger ball sticking out more. The user rolls the ball with their thumb, fingers, or the palm of their hand to move a cursor. Tracker balls are commonly used with disabled people but are also used on CAD workstations. Some clip onto the side of the keyboard and have integral buttons which have the same function as mouse buttons. Trackballs are sometimes seen on computerised special-purpose workstations, such in an air-traffic control room. Military mobile anti-aircraft radars and submarine also use trackballs.

#### **The advantages of tracker balls are that:**

Ball movement depends entirely on the thumb. Therefore the user has no stress or constraint on movement of the rest of their hand, arms, or shoulder.

The thumb provides excellent control over the ball - and this is entirely independent from the action of the fingers which control the switches.

Ball movement is sensed optically - so dust does not upset movement detection. After perhaps a lot of use (a month or two of my several hours a day computer use), it is necessary to pull the ball out and use a cotton-bud to remove dust which collects around the three support spheres. You will know to do this when the ball does not move perfectly freely, as it should.

The right hand rests naturally on the device.

There is no need for a mouse mat or desk room for mouse movement - so less desk space is required.

There is no need for a flat surface. If used with a laptop, you could rest it on your knee.

#### **The disadvantages of trackball:**

The trackball costs significantly more than a mouse.

A mouse may be better for drawing actions in a graphic program.

The right hand must be used.

Trackballs have had some limited use in computer and video games, particularly early arcade games.

Console trackballs, meanwhile, are fairly uncommon.

His work at the council requires me to use a computer very often in typing up letters minutes for meeting and also he also takes minutes during the meeting after his stroke he had to work out ways of performing his roles and his employer particularly had to work out ways of performing my duties so that he could continue with my work as effectively as possible. This is why he has a tracker ball to allow him to continue with work efficiently without the tracker ball he would suffer lots as it is very hard to use a normal mouse for some one with a mobility problem.

I had an interview with the occupational health adviser which was very help full in advising of various technologies which could help me to continue my work social and personal life as best as possible one of the technologies she introduced me to was the tracker ball mouse this mouse way very use to me in allowing me to control the devises and to control the mouse around the screen it was called the able track mouse and it also has to external hand switches because I cant actually use the buttons on the tracker ball mouse I use the external hand switches to do left hand and right hand clicks which is very useful to me my employer bought this for me so I can continue my work and I have now bought one at home so I can use the computer at home in the same away.

The able track mouse has been amazing in allowing me to control the computer its not to sensitive so that any wild movements don't move the mouse to much the only problem is that maybe I have to move my wrist quite far to click on the buttons on the left and right of the mouse and it would be nice to be able to maybe press down on the tracker ball to have a left hand click that would be quite useful but apart from that it really is very helpful in allowing me to navigate through the computer and I can use it just like a normal mouse in every way.

I need to keep in touch with my family abroad using msn instant messenger and email without the tracer ball mouse I wouldn't be able to use the computer to access the software a normal mouse would be to difficult for me to use and I would not be able to hold it properly and I would be able to click on the buttons and it has been a life saver.

I have a sister in Jamaica who I try and contact as often as possible and again the internet allows me to do this effectively without having to use effective telephone calls.

I like many people that feel the need to go out on Friday night and I usually arrange this using instant messenger or emails as I can email lots of people at the same time or group of friend that meet on a Friday night and we can line up on a white brooder note when I use ICT outside of work and home I do get upset about the lack of access to mice that are appropriate for me its very rare like in a internet café particularly of there to be any devises that are useful to me and even in local libraries I have difficulties.

At work I need to produce word documents I need to handle email produce emails receive and transfer forward on emails I need to take minutes at meeting produce agendas and handle a number of spreadsheets and databases to do this I need some form of input devise to control the mouse pointer and I find that the track ball mousse I perfect for this although maybe these is another technology out there that may bee a little quicker for me I don't know.

The other day I was very bust I had to produce the minutes for the directors meeting and give them out on the same afternoon and I was very aware that the control over the computer that I have is not as good as it use be maybe before I could have produced this document in half the time using word but now its taking longer because the lesser control I have over the mouse pointer particularly navigating around the window in word dragging and editing text is quite difficult.

