Blackboard to Whiteboard

By Joyce Knox

The Development of Technology in Primary Schools

I started my teaching career in Halifax and then continued in Hull from 1972 until I retired. I mainly taught the 5 to 7 year olds in Key Stage One

For the first 20 years of my career all teaching was done using chalk and a blackboard which although messy had the advantage that things could be rubbed out and altered easily. Practise was needed to be able to write in a straight line and use the appropriate script for the age of your children. It was also difficult to face the class and write on the board. On some occasions I would put information on the board before I went home ready for the next morning and then come in to find that an enthusiastic cleaner had rubbed it all off! Often the children would work from the board completing maths and language activities that I had written up. We did have a few text books with grammar exercises but mostly the children used work cards which were hand written by the teachers and covered in shire seal so that they could be reused. Applying shire seal without getting wrinkles was another skill which needed practise.

The Banda was another implement that could be used if you wanted several copies of the same thing. This was a spirit duplicator and information could be written, typed or drawn onto a master sheet laid over another sheet which was impregnated with wax. The wax transferred to the back of the master which was then put onto the drum of the machine which acted as a printing plate. As the handle was turned the spirit softened the wax and as the paper went through the spirit impregnated wax transferred to the paper. You could make around 40 copies from one master all with the distinctive smell of the spirit and usually in purple. There was generally only one Banda in the school and so it was not always available and I found it messy and laborious and so generally avoided its use.

The first proper piece of technology that became available was the photocopier in the late 1980's. This revolutionised copying but the first machines were small and printed very slowly. They were also expensive to run and so teachers were usually rationed as to how many copies they could make and again there was only one for the whole school and so initially their usefulness were limited. Also none of us had a typewriter, computer or printer and so the office staff had to be persuaded to type something up or the item to be copied had to be hand written. However things were about to change!

I can't remember the exact date when my classroom got its first computer but it must have been around 1990. It was a BBC model made by Acorn. Initially the computer came with a box of tapes, containing the programs, and a cassette player. For the computer to recognise the programme on the tape the volume control had to be adjusted so that it was 'just right'! It was all very hit and miss and could be frustrating. There was one computer for each class and so when demonstrating how to use a program the room had to be arranged so that 30 plus children could see a screen about 15 inches square. The first programs tended to be educational games where the children could practise sums and spellings. However from then on things moved very rapidly and software was on a floppy disc that could be loaded quickly, programs became more sophisticated and there was a mouse instead of using the arrow keys. As there was only one computer in each room the children had to take turns to use it and so it took a while for all the class to get their turn. The ones who were last had often forgotten what to do and so teachers were trying to supervise and teach the general class and help the child who was having

a problem at the computer. Of course all this was expensive and during the 1990's much of the educational budget was spent on upgrading computers as each new development took place. After some initial scepticism teachers began to become more enthusiastic about computer use as the benefits to the children became more obvious. The National Curriculum introduced in 1989 asked teachers to embrace Information Technology as a separate subject teaching children to communicate, handle data, computer modelling and to control and monitor devices. Many of us found this challenging at first as we were learning to do these things ourselves and were often only one step ahead of the children. In fact I think this was the main grumble of many staff. All this new technology was given to us and we were told what we were expected to teach but training was at best spasmodic and many felt totally out of their depth.

The next breakthrough was the introduction of a computer suite where the whole class could work together although at first this was often in pairs. Networking began and so each child could have an account on the school server and save what they had been doing so that they could return to it later and the teachers could access the work for assessment and marking. Having an account meant that the children had their own user name and had to log in. Their user name was usually their surname and initial. This was OK if you were Joe Hill but not so good if you were five, had learning difficulties and your surname was Schaferstrommer. Press the key too heavily and a whole line of the same letter appeared! We were told that each child needed to learn to log in and we were not to do it for them meaning that some children took that long to get into the system that they hardly had time to do anything. However it quickly became apparent that most children enjoyed and benefited from IT and they were quickly producing their own posters, booklets, adding sound and graphics, and writing simple instructions to control robots. Many firms and individuals saw the potential for computer use in schools and soon there was a vast resource of colourful engaging material that schools could buy into. The computer could now be used by the children to enhance every subject in the curriculum and even the youngest children could make an animated story board or compose a short piece of music.

Although the children's Information Technology was improving the teacher still did most of their teaching in front of the class using a blackboard or later with a marker pen on a whiteboard. In the early 2000's came the next milestone when Interactive Whiteboards were introduced. The computer screen could now be seen by the whole class as it was projected onto a screen which took the place of the blackboard. Also the board, like its name suggests, was interactive and so with the special pen you could add to and manipulate what was on the screen. With the use of our smart phones and tablets we take all this for granted now but when the whiteboards were introduced they revolutionised teaching methods. We used a programme called Easiteach which was full of shapes, clipart and other graphics and so interesting lessons could be prepared at home and practical ideas could be demonstrated. For instance, when teaching fractions or division the objects on the screen could be moved into groups so that everything could be explained visually. Children could come to the board and explain their ideas to the rest of the class. Television programmes could be watched on the screen instead of the large TV having to be wheeled into the classroom, the internet could be accessed so opening up its vast resource to the children. The lesson could be saved and so used again on another day or by another teacher. There were drawbacks on occasion. It was possible to come into school to be told 'the network is down, you can't use the computers' and so an evening of preparing lessons was wasted and, as the blackboard had gone, you were left to write on a sheet of paper fastened to a flip chart. Light was another problem as if the sun shone on the board the children couldn't see it. Blackout blinds were installed but then

when the children were writing at their desks but still needed to see the screen they couldn't see what they were doing!

Again many educational firms and publishers started to create lessons that could be downloaded and teachers themselves uploaded lessons on to the internet and as I was coming to the end of my teaching career some of the younger teachers seemed to search for and use these lessons instead of creating their own tailored to the abilities and needs of the individuals in their class. Although I feel there is a place for readymade materials I do believe that the prevalence and reliance on them has left many thinking that anyone can teach and the job can be delegated to a teaching assistant which seems to be happening in more and more schools.

I retired at the end of 2009 and since then technology has continued to advance. I believe that computer suites are now old hat and there are now class sets of tablets and I'm sure many other changes are taking place. I wonder what the next 50 years will bring?