

Creating a primary school design and technology workshop – a diary

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The end of the school year in July 1996 saw the departure of a much loved and respected member of staff. However, it is said that every cloud has a silver lining – and the early retirement of Mavis did in fact leave us with a surplus classroom. Since joining the school five terms previously I had been developing design and technology with the familiar constraints of not enough room for resources (well actually, no resources!), and the problem of trying to teach a practical subject in cramped teaching spaces.

This article documents the six-month process of adapting our surplus classroom into a dedicated teaching and resource area for design and technology. This was done at the same time as revising our policy and scheme of work for the subject.

August

I went on holiday! However, I did put thought to the feasibility of converting the empty classroom into a dedicated teaching space for design and technology. It appeared that there would be three main areas to consider:

- Resource acquisition – whilst being an obvious factor, we would need to decide exactly what we would need and investigate where we would get various items from. Having a very limited budget

from school I would also need to look into the possibility of alternative funding – would the PTFA be able to support us?

- Obtaining suitable facilities for storing consumable resources, tools and equipment, work in progress, items useful for investigative, disassembly and evaluative activities, etc.
- We would also need to obtain suitable tables and other furniture of an appropriate height for the children to work at – bearing in mind the fact that primary aged children do vary in height quite considerably.

September

I soon discovered that there is no such thing as an empty classroom in a primary school. Any potentially unused space quite quickly becomes the dumping ground for broken furniture, lost property and umpteen boxes of unsold jumble sale goods (do people really buy old smelly trousers full of holes?). However, after a quick sort out off we went...

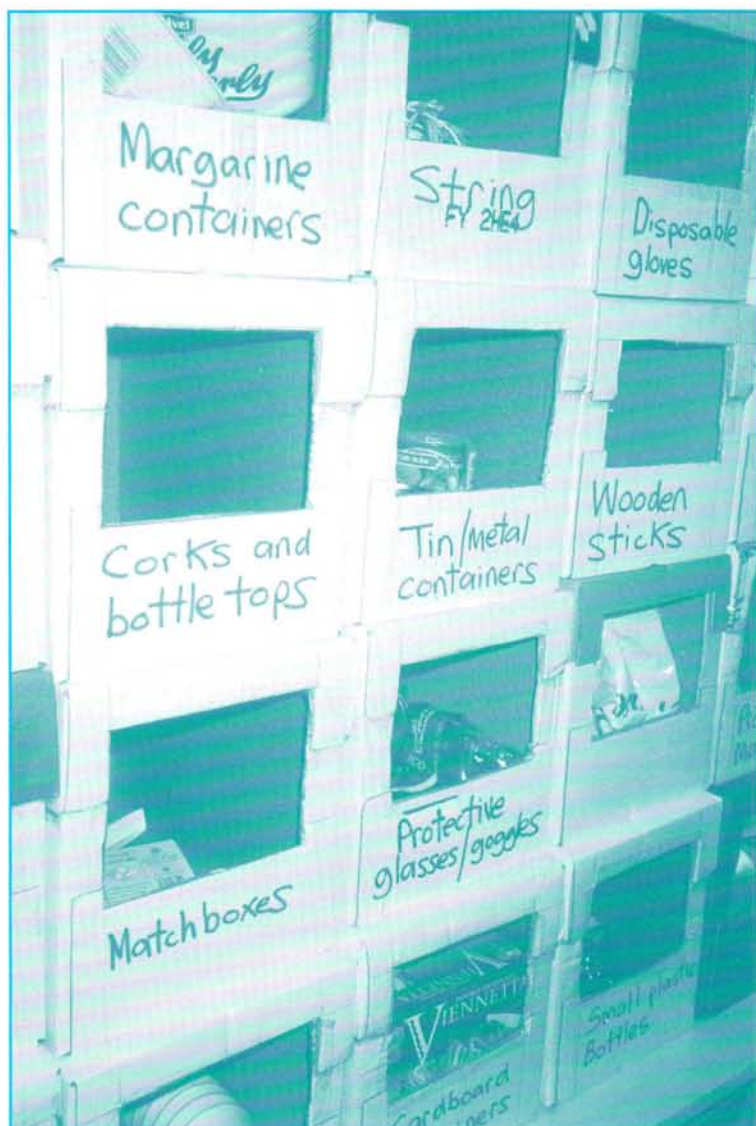
- One of the first things which I did was to make a computer generated sign announcing that the room would be

September 1996 –
Tables, cupboards
and benches start to
be acquired



called 'The Workshop'. Although this is a bit of outdated secondary school terminology I felt that it was easier for children to remember and pronounce than the other possibilities.

- With the help of Derek, our school caretaker, I started to obtain likely furniture. What we found was of differing quality, and at this stage some of the items looked more suitable for the November 5th PTFA festivities than for a workshop. However, a quick sort out left us with the items with potential, while the rest went off to await a hot November 5th fate. Amongst the useful items were some surplus tables previously used in the dining room. Being Formica topped these would be very serviceable as well as being useful for food technology activities.
- In response to an earlier letter which I wrote to parents asking for classroom help, a parent started to come in on Thursdays to help repair and renovate the furniture. This involved sanding down and revarnishing bookcases and tables. In a rather cold and damp part of school lay an old secondary school woodwork bench which had seen much better days and needed to be partly dismantled before it could be repaired. However, it is amazing what a coat of coloured polyurethane can hide and with a few pieces of new plywood on the top the bench was as good as new.
- Last year I nurtured the support of a granddad of one of my pupils. Together with one of the governors they set about the task of painting some old cupboards and varnishing the frames and legs of the old dining tables.
- One of the storage systems which I had decided to adopt was that of using photocopier paper boxes with part of the end cut away. This is a cheap but effective way of storing small lightweight items such as film canisters, margarine containers and the like. The grand plan was to have 120 such boxes in piles on an existing shelf along the end wall. Although we are frequently reminded about the amount of photocopying with

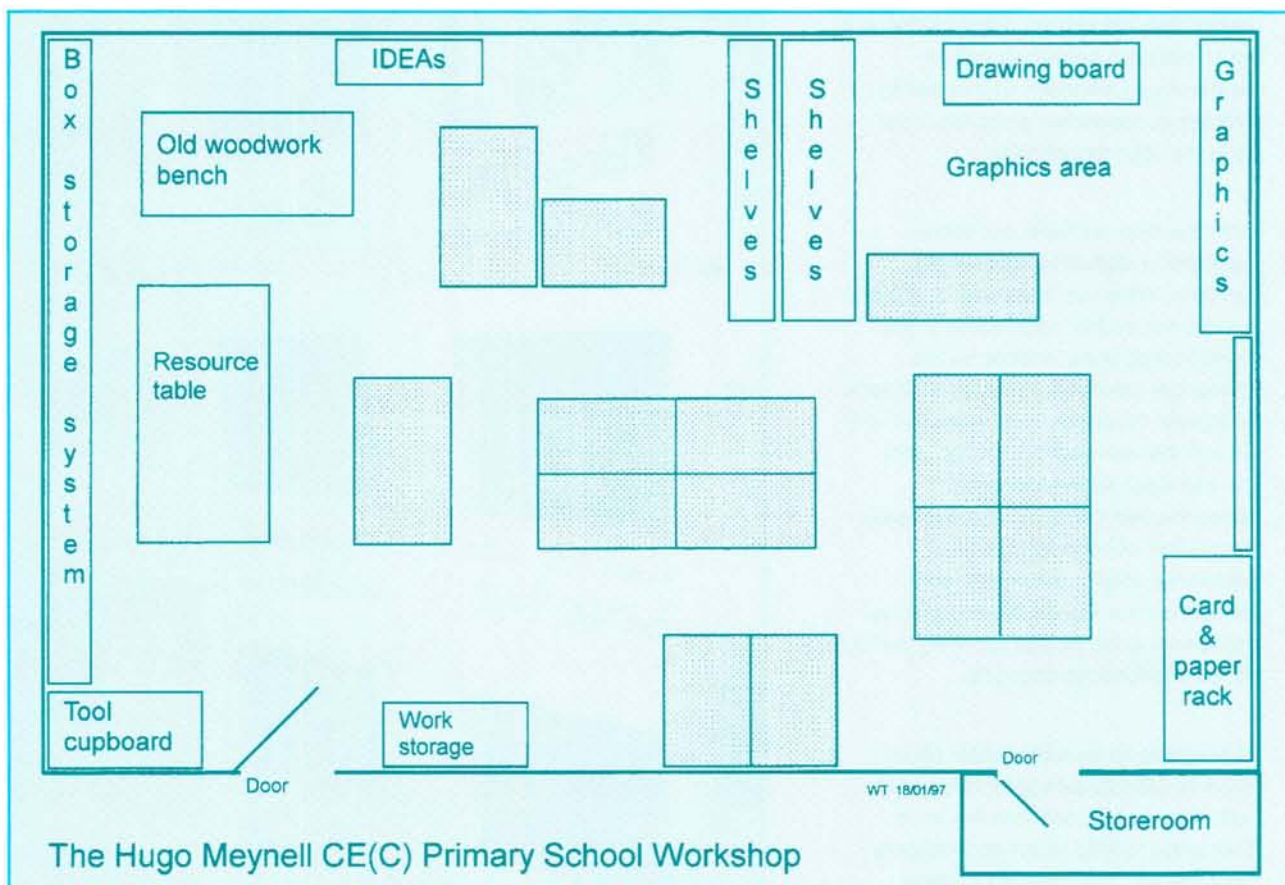


which our poor photocopier has to cope, it would still take us several years to collect this number from school. Again, a request to parents brought contacts with print rooms – the boxes came steadily in – and the cutting up of the boxes became another job for a few kind-hearted parents.

Part of the photocopier box wall, which comprises 105 boxes that have been cut and labelled to provide a cheap, but effective storage system

October

- I wrote a letter to all parents and governors explaining a bit about design and technology and what we were starting to do with the room. To accompany what was basically a well worded begging letter I also obtained and sent out the DATA/DfEE leaflet about design and technology. I also attached a list of the types of resources which we would need, together with an



An outline plan of the workshop

'Artist's impression' of my vision of the workshop.

- Our Autumn term parent's evening also offered an opportunity to have a captive audience in which to advertise our plans for both the workshop and the subject. A few well-placed signs around school managed to attract a steady flow of interested parents, and although the workshop was far from complete I managed to set up several displays of children's work together with photographs of previous design and technology activities. A few notices listing items still needed also proved useful.
- I also prepared and sent the local newspaper a press release telling them of our plans but also asking readers for help with resources. A photographer subsequently came and captured a couple of rather sad looking children holding tools – but looking more like Oliver Twist when he famously asked for more!
- The publicity worked. Among the items received were a collection of industrial type storage units together with some racks for fixing them on. Although a bit grubby, our dishwasher worked wonders although my wife was puzzled as to why some of our glasses seemed to have oil smears on them. I didn't tell.
- One of the advantages of working with primary school children is that they are always enthusiastic to help – seemingly with any task! Trying not to offend the ones left out, I established a small group of workshop monitors who would be responsible for putting away the growing collection of margarine containers, cardboard boxes and other recycled resources sent in by parents.
- Another small group of children (from Year 6) also volunteered to stay on after school on a few occasions to lend a hand. Much of their time was spent following a well trodden route to the bins to deposit numerous unwanted items which had been gathering dust in the storeroom. This readiness to help tidy

up came as a shock to some of their parents who claimed that this hint of domesticity by their offspring was a talent not seen at home for some years!

- Having now acquired a reasonable range of furniture I experimented with the layout of the room. One of the major factors in deciding where to put the furniture was the location of the radiators, which not being very efficient needed every opportunity to pass on their lukewarm heat to the surrounding air. It was important to test the layout with children in real learning situations and my class were delighted to be the first to use the room. One important fact that teaching design and technology in a primary school has taught me is that it is essential that children are made aware of what resources are (and are not) available for use with their activities. If this is not done, and other resources are openly available, then children can approach their work with the enthusiasm of the winner of a supermarket dash – grabbing and using everything in sight! I can clearly recall a colleague coming to me several years ago asking if I could get some more 'shiny metal' for her class to use. On investigation I discovered that some of the class had been using plastic mirrors which had consequently been cut up to make the ends of litter pickers – oh well! To avoid a repeat of this situation I allocated and named a separate 'Resource Table' onto which resources to be used would be put prior to starting each lesson.
- An eagle-eyed colleague noticed an advertisement in the county bulletin for two woodwork benches offered for sale by a primary school in another part of the county. At £15 each, complete with vices, these had got to be the bargain of the month! Although it is classed as a small car it is surprising what you can get in the back of a Fiat Punto – and an early morning journey across the county saw the benches in their new home.
- The furniture renovation and painting continued...



November

- Using the computer again I made some signs to indicate the different parts of the workshop. These included Graphics Area, Storeroom, Resource Table and Tool Shelves, to name but a few. I also felt that it was important for other classes, staff and visitors to see examples of work in progress and so an old bookcase was allocated to be a 'Work in Progress' display case with a suitable sign indicating this.
- Another specific named area making use of an old bookcase and tray unit was to be an IDEAs area – not for children to sit and wait for the inspirational type of ideas, but a dedicated place to store items for investigative, disassembly and evaluative activities (IDEAs). Among the items collected so far are several telephones, door locks, a hair dryer,

Above: A table dedicated for displaying resources available for particular lessons has proved useful in avoiding misuse of materials

Below: The graphics area provides storage for a range of drawing resources as well as design sheets, worksheets, pupil and staff textbooks and other publications. Adjacent is an ex-industry drawing board and tables for a small group of children to participate in drawing and design activities





December 1996 – The workshop is now ready for use, and even the spaces underneath the tables are utilised for storage!

clocks and an assortment of electrical items including switches, plugs, and sockets. The pièce de résistance is an electric drill of which a kind parent sectioned the case to show the internal components. The intention is to gather a wide selection of items which are featured on the CD-ROM 'The Way Things Work' produced by Dorling Kindersley. The children can then use IT to find out as much as possible about the items which they are investigating.

- Another material aspect which I focused on at this time was that of textiles. Following discussions with a parent who makes curtains for a living, we started to build up a stock of fabric offcuts which were stored in the photocopier paper boxes. I also put out an appeal for wool, cotton and thread.
- Spending money time. Having had a modest amount of capitation allocated to spend on design and technology materials, I had deliberately delayed writing orders in order to avoid purchasing items which I might otherwise have 'acquired'. However, the time had come to order non-scroungeable resources, and so after collecting the inevitable carrier bag full of catalogues at the annual Design and Technology Education Exhibition at the NEC, I hastily prepared orders mainly for items such as dowel, wood and consumable electrical components.

December

Joseph and Mary time! Primary colleagues will know that Christmas concert rehearsals, class parties and other end of term events dominate the final month of the year. However, there was still much to be done before the workshop could be considered ready for use.

- The notice boards were still bare, and so I put together some displays of graphics work including examples of our recently revised design sheets and booklets which we use to record design and technology activities. I also displayed suitably labelled photos of previous design and technology projects.
- One of the last areas to be established was the graphics area. To make it look as intended I arranged a couple of small tables together with a selection of equipment such as pencils, felt tips, compasses and rulers. Using the tops of photocopier paper boxes as storage trays I also laid out a supply of design sheets and booklets.
- Our school's collection of design and technology publications and other teacher resources were rounded up and displayed in a suitable location adjacent to the graphics area.

January

The Grand Opening!

The workshop has now been in full use for several weeks, and whilst much work still needs to be done it has become obvious that our school now has a really useful resource. From our experiences so far I have briefly listed the advantages and disadvantages of having such a dedicated teaching space.

Advantages

- The workshop has enabled us to have an area to keep design and technology resources together. My classroom is now a lot tidier now that the design and technology resources are elsewhere!

- The room has proved to be an extremely useful teaching space, not just for design and technology but also for science and art.
- The profile of design and technology has been raised throughout the school community. Children see using the workshop as being something special.

Problems/disadvantages

Having a specialist room for design and technology is not however without its disadvantages:

- There can be timetable problems, and there is always a danger that the room may get so popular that several colleagues may want to use it at the same time. Coordinators will need to get colleagues out of the habit or tradition that design and technology is only an afternoon subject – with Fridays being the most popular!
- With any shared teaching space there is always a danger that the room can become untidy as colleagues rush in and out often leaving resources depleted and workspaces messy. At the moment I am endeavouring to keep the room tidy using a combination of diplomacy, notices and monitors. Only time will tell if this strategy will work.

Helpful hints

From my experience of setting up the workshop these are some tips for colleagues considering developing a dedicated teaching space for design and technology:

- Allow plenty of time. If anything double or triple the amount of time which you first estimate that setting up the area will take!
- Tell as many people connected with the school as possible about what you are doing. If approached in the right way parents can frequently offer the extra pairs of hands vital for the success of the project. Parents and governors also have tremendous contacts with business



and industry and can invariably help with the acquisition of many resources.

- Choose a small group of children to act as workshop monitors. They can be responsible for tasks such as keeping resource containers tidy and getting tools and equipment out prior to lessons.

The workshop came alive in January 1997 when children from each of the Key Stage 2 classes started to use the facilities

My experiences during recent months have also reminded me of an interview question once asked of me by an elderly governor: "What is the most important quality that a good teacher must possess?" After failing dismally with answers such as flexibility, being able to provide differentiated work, etc., the old boy put me out of my misery. "Son," he replied wisely, "the most important quality of a teacher is to be a good scrounger!"... and this was before LMS and the introduction of the National Curriculum! I wonder if he had a crystal ball at home?