

# New Resources for Technology Teachers

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Many teachers of technology, particularly those new to the subject believe that 'megadoses' of new hi-tech hardware and software are essential if the National Curriculum is to be delivered. They are encouraged to think so by a legion of enthusiastic suppliers. But they are only partially correct. Much of the technology curriculum, particularly in the crucial but neglected Business Studies area, is about understanding the systems that control everyday life.

Fortunately there is a rapidly growing range of new equipment that can help and much of it is free to teachers. Particularly interesting is *What is a Barcode?* an information pack for classroom projects produced by the Article Number Association. Consisting of lesson notes, diagrams, teachers' notes and technical notes, it provides the basis for a wide spectrum of work ranging from Key Stage 1 shopping projects to Key Stage 4 marketing studies — involving a range of understandings in topics such as shopping behaviour, cost and quality control through to algorithmic mathematics, and yet building on the everyday experience of the pupils.

There is also a very attractive range of visits available for schools. Pride of place must go to Flightlab at the Science Museum where a new gallery is devoted to hands on exhibits which explain the principles of flight simply and effectively. The culminating exhibit is a sit-in Cessna cockpit in which the visitor can experience, with an instructor in attendance, all the pre-flight routines up to take off. A teachers' guide is available for pre-visit preparation.

Well worth a visit for senior pupils working in the development of design and technology is the Wilkhahn Showroom in the Watermill development at Newton Abbey Mills, South London. This famous German chair-making company has established a remarkable display of its outstandingly designed furniture in the historic and attractive old industrial site. Small numbers and advance discussion are obvious



*Above: A Cessna 150 two-seat light aircraft being made ready at Flightlab.*

requirements as the showrooms are not planned as a 'resource' for schools.

Elsewhere the range of commercial products expands unceasingly. Recent items of interest include Wey Adhesives *Magic Princess* glue gun — which, it is claimed, is easy to use by small children and safer because it operates at low temperatures.

Energy Facilities Management have new modular home economics furniture which offers multifunctional work areas suitable for a wide range of home economics and technology use in primary and secondary schools.

Typical innovative items are two new products from Wellgate, instruments that are likely to be invaluable in designing and modelling. The *Anglemaster* is a combination of protractor, set square, centre finder and ruler which allows the user to construct angles, find angles and draw with a speed, accuracy and efficiency that is difficult to achieve with

the centuries old traditional drawing instruments.

The other product is *Circlemaster* which eliminates the traditional compass with all its hazards. Designed to take ballpoint pen, pencil or felt tips the 'Circlemaster' draws circles in increments of 1 millimetre, creates lines at given angles and can locate the centre of a circle easily and efficiently.

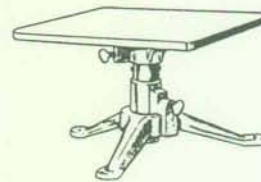
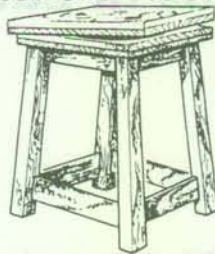
Stanley Tools have devised an improved range of screwdrivers — the *Magnum* range — with significantly increased gripping power, to give even young hands much better turning strength.

The difference lies in the unusual handle shape and composition. The tri-lobular shaped, seamless handle is made from a composition of hard and soft synthetic materials chemically bonded for strength and durability. This creates a smooth, 'rubber-like' feel for the maximum comfort whilst ensuring optimum grip even when hands are wet or greasy. Strength comes from the 'power panels' around the handle, enabling even young hands to turn difficult or worn screws. There are 46 sizes in various patterns.



# SCULPTORS'

materials~tools~studio equipment



Home Economics teachers will be enthusiastic about the intriguing prospect of embroidery with a Macintosh with the aid of the Japanese *Poem* system. Claimed to be as simple as using a printer, complex designs can be drawn with bit map images using a Hyper Card base.

*MacEmbroidery* transforms the bitmapped image into high-resolution, picture-perfect embroidery. The Macintosh display lets pupils do actual-size embroidery with the POEM machine: what they edit with the display corresponds exactly to the actual embroidered result.

Once drawing data is transformed to embroidery data and the embroidery process is simulated on screen all that is needed is to put the relevant thread and the embroidery frame into the POEM machine. Multiple layers can be used to achieve multiple colours.

The *Spiralux* Electric Fretsaw from Neill Tools is a tool for making models, toys, puzzles, wooden designs and even marquetry. Its vibratory action allows a wide variety of materials to be shaped into intricate and accurate designs with a professional finish. Its unique design allows it to cut a wide range of materials including sheet metal with little risk to fingers and it can be easily worked by adults or supervised children.

The Electric Fretsaw features a large reinforced surface with sliding gauge for securing and guiding the workpiece and the blade arm is also deeper than that of other saws, so increasing manoeuvrability of the workpiece and allowing a large piece to be cut. The controlled vibratory action will cut both solid and hollow materials working at 6,000 strokes a minute. The Electric Fretsaw comes supplied with spare blades and a balldriver for the blade replacement. A comprehensive range of blades is supplied by Neill Tools but the Electric Fretsaw is also compatible with other fretsaw blades available from tool and hobby shops.

woodcarving & stonecarving tools, arkansas slips & stones, pyrography, clay modelling tools, modelling & carving stands, square aluminium wire, armatures, waxes, clays, plasters, metal modelling tools, ciment fondu, mod-roc, newclay, newplast, polyester & urethane resins, silicone rubber, alginate, latex, vinamold, glassfibre, metal fillers, pewter, low melt metals (for casting into silicone rubber), swann morton, CENTRICAST centrifugal casting & mouldmaking machines



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Circle Number 105

Edding is now distributing perhaps the most ingenious and simple new product — the *Assa*, three-pronged, tempered steel thumb tack, produced in Italy.

The major problem with a traditional drawing pin is that it has only one single, central spoke, which must be thick enough and long enough to hold whatever needs to be affixed. Consequently the underlying surface always suffers damage. As the *Assa* tacks have three prongs to hold, they need be neither thick nor long and so the underlying surface is hardly affected.

The upper surface of the tack is larger, flatter and smoother than a standard drawing pin, so the pressure required to push it in is distributed over a wider area, plus with the lesser distance to push, one's thumb is put under considerably less strain and stress. The wider, flatter top combined with the shorter prongs also makes the *Assa* tack easy to remove. *Assa* thumb tacks are £1.28 plus VAT for a box of 100.

### Addresses

C W Edding, (UK) Limited, Merlin Centre, Acrewood Way, St. Albans AL4 0JY

Energy Facilities Managment Limited, Bridge Street, Manchester M27 1FJ

MacSolutions (UK) Limited, 24 Cliffe Terrace, Keighley BD21 5DP

Neill Tools, Handsworth Road, Sheffield S13 9BR

Science Museum Education Service, Science Museum, Exhibition Road, London SW7 2DD

Stanley Tools Limited, Woodside, Sheffield S3 9PD

Wellgate Drawing Instruments, 37 Blackwellgate, Darlington, Co Durham DL1 5HW

Wey Adhesives Limited, Unit 2, Miltons Yard, Petworth Road, Witley, Godalming GU8 5LH

Wilkahm Limited, The Old Showhouse, Watermill Way, Merton Abbey Mills, London SW19 2RH