

Crewe & Alsager Faculty, Manchester Metropolitan University

The work illustrated here is a representative sample from a wide range of design and technology activities undertaken on the BA (Hons) Secondary Education D&T, 2-year BEd. (Hons) and 2-year PGCE courses at the Crewe & Alsager Faculty. All students are taught by a range of practising professional designers/technologists and tutors with experience of teaching D&T in schools, thus providing a healthy balance of professional expertise.



Integrated luggage rack by Michael Blakeman

This is designed to integrate the car roof-rack system with purpose-made luggage so that the two fit easily and safely together. The project was undertaken with a major manufacturer of roof-racks together with Carlton, manufacturers of quality luggage containers. The design incorporates a number-code lock which secures the luggage to the rack.



Slurry aerator by Jeremy Kneller

This is an attachment to a standard Malgar slurry stirrer and comprises a pulley-driven blower forcing air down the propeller shaft casing and out at the impeller. The purpose is to aerate cattle slurry whilst it is being stirred. The helps to fix the nitrogen and prohibit methane-generating bacteria.

Its a Gas! — a portable gas cooker designed by Sarah Mintey

This staff-initiated project required students to create a concept model for a portable gas cooker which could be used in a variety of situations. Sarah demonstrates here how product styling, ergonomic and user aspects were considered alongside technological and manufacturing requirements to meet a specification and thus a viable product proposal.



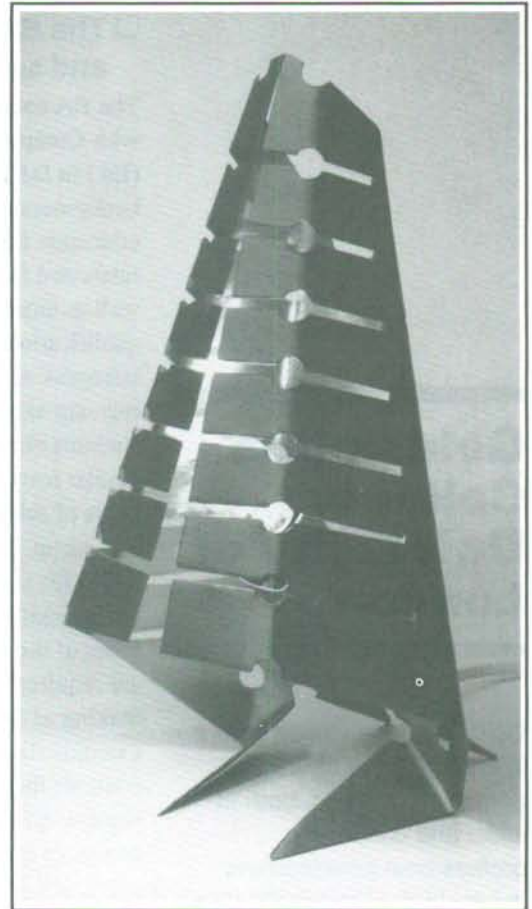
Josephine Martin's Raku kiln for primary schools

Teachers are often reluctant to build home-made raku kilns for safety reasons particularly when they are for use by young pupils. This kiln is safer, easy to operate, portable and relatively inexpensive to manufacture. The design and development were support by BVK Furnaces and Combustion Linings, both of Stoke-on-Trent.



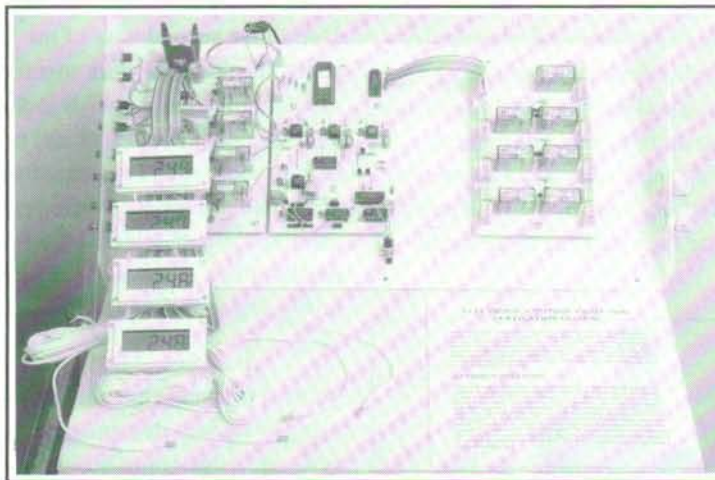
Tensile structure by Sarah Whitcutt

This low-level table demonstrates risk-taking to create an unusual solution to a familiar problem. It sensitively balances both visual and technological elements in response to a staff-initiated project based on tensile structures.



Jardinière by Bridget Elton

This is an example of staff-initiated projects for first-year students, designed to enhance students' understanding and experience so that they learn to use materials with imagination and discrimination.



Heating and ventilation system for a bean sprout unit by Gerald Wright

The growing of bean sprouts is a risky business, requiring particularly fine control of temperature and air change. Gerald's project included the design and manufacture of the heating and ventilating units made from galvanised steel, the electronic control system illustrated here, and the software to make it run.



Mark Harris's design for a two-seater light helicopter

The design features a 200 hp rotary engine using composite technology including a pilot/co-pilot crash cell. These features plus many other design innovations are hoped to lead to an affordable two-seater light helicopter.

R. G. Robinson