

## University of Wolverhampton

The Centre for Design and Technology Education (CDATE) is part of the Faculty of Education at the University of Wolverhampton and has superb accommodation for students wishing to study D&T as a single subject at BA and MA levels or as part of a teacher training BA degree. CDATE operates with a comprehensive range of resources, skills and experience to help train students for a challenging and exciting career. In the midst of unprecedented change in education, the CDATE continues to move ahead with innovative programmes, including courses which have gained outstanding quality status. CDATE gained a Partnership Award in 1991.

Collaborative training and exchange programmes with overseas institutions are increasing educational opportunity and staff are actively involved in providing training and

maintaining exciting links with the United States, Canada, Hong Kong and Europe.

A number of research activities include developments in resource-based learning and initiatives involving joint projects with industry and schools as well as product design and the patenting of inventions. All students are encouraged to undertake research which takes them into industrial contexts. Masters courses are pursued and the concept of competency-plus learning and total quality pervade all levels of student activity.

### □ Programmes of Study

CDATE offers Design and Technology subject modules that contribute to BA Modular Degree Awards in D & T, plus 2-year & 3- year ITT Awards. A full complement of D&T modules includes the following strands:

*In the example here, the student, John Trumpeter chose to study electric point of sale technology:*

### □ Electric Point of Sale

#### Project Outline

It is essential to understand the needs of the customer to ensure a successful business; their needs are paramount and therefore must be addressed. Research shows that shoppers consider the most important requirements of a supermarket to be friendly staff and speedy checkouts.

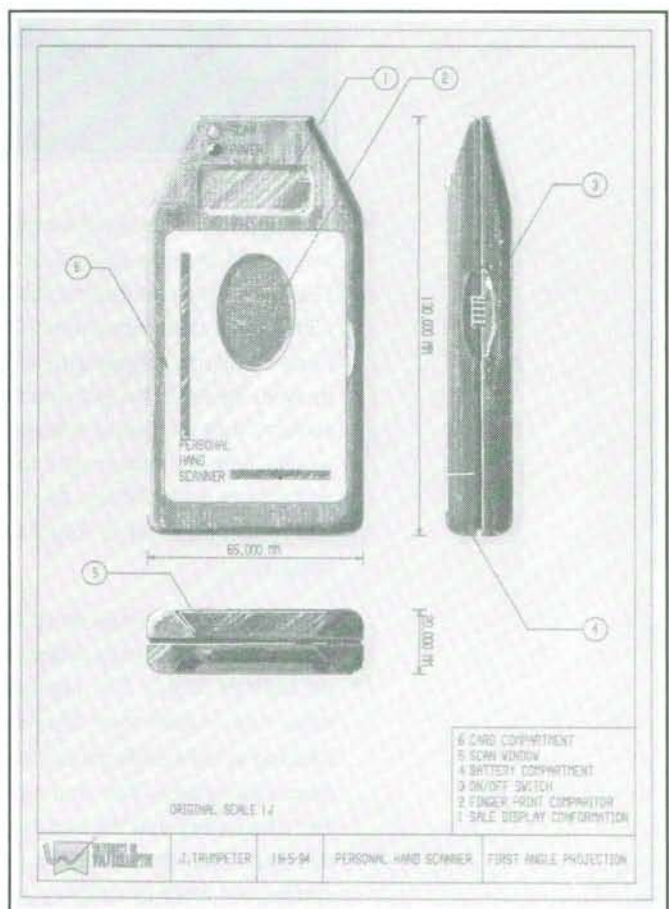
The use of debit and credit cards together with electronic fund transfer at point of sale (EFTPoS) is growing; this is quickly becoming the preferred method of payment in supermarkets.

EPoS (electronic point of sale) means that the goods you buy have bar codes and are scanned electronically at the checkout. The prices are stored on a computer and you are issued with an itemised receipt of what you have bought. EPoS is a modular system and each module can be customised if required to suit the exact needs of each retail organisation.

Most supermarkets now have EPoS and a growing number have EFTPoS. Money is deducted from your account as soon as your debit card is passed through a machine.

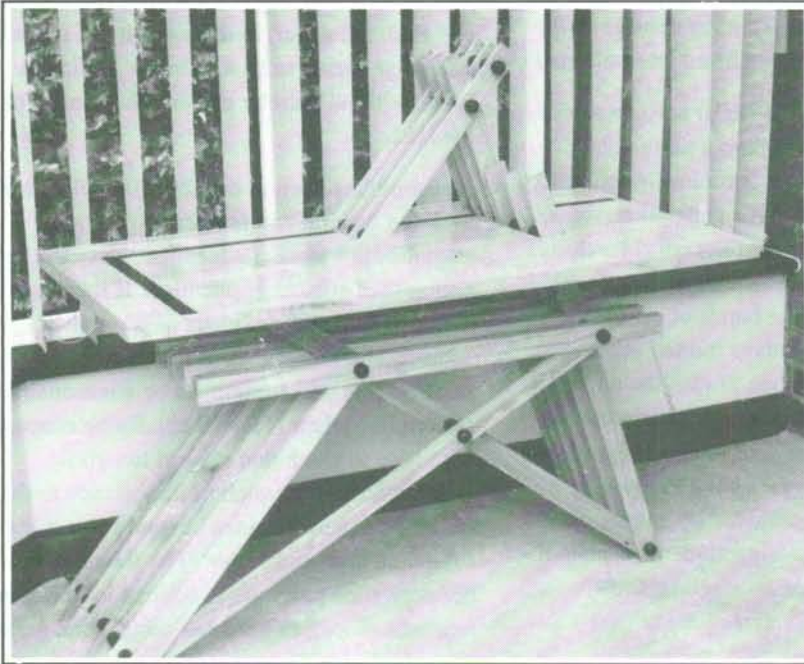
There are new developments in packaging, scanning, smart cards and computers, possibly the most exciting being the development of self-scanning equipment and intelligent packing which could reduce or eliminate the need for checkout staff. The members of staff freed from these tasks could then be made available on the shop floor to assist shoppers and offer a more personal service to the people that require it.

This project has provided the opportunity to produce a concept model of a hand-held personal scanning device which would automatically debit funds from an account when used in any situation.





This project began with an exploration into the effects that can be achieved by contrasting various timbers and continued with an investigation into non-traditional methods of joining timber. It produced an unconventional method of framing for supporting a horizontal surface, thus enabling personal development in terms of materials and processes.



From the early experimentation a potential was identified to develop a final product around the contrast of ash and rosewood, and a method of constructing the frame using ash slats and exposed dowel joints was used. The major problem to be overcome was that of rigidity. Was the frame capable of supporting the top? The introduction of the cross braces appears to have overcome the rigidity problem.

The final outcome demonstrates the potential in terms of construction and illustrates the possibilities of transferring this construction method to other items of furniture. Although a writing table has been produced, it is satisfying that regardless of function, it is an item of visual impact and extremely satisfying to have had the opportunity to enhance my making skills.



- Graphic & Communication Presentation
- Designing & Making
- Technology
- Perspectives Business Issues

The following examples of students' work illustrate two contrasting modules in the Design & Make strand. The first illustrates a Critical Review module, which is described in the following terms:

This module is concerned with a critical review and evaluation of a technological issue and its contribution to the development of the design and technology practitioner. Students are encouraged to articulate particular technology viewpoints to produce a mature body of scholarship and practice in a production context. Research will centre on the processes leading to innovation, product and manufacture.

The second example illustrates a student's work for the Personal Development module. For this module, Ruth Cleeton designed and made a writing table.

*Bob Booth*