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Craft Design and Technology Conversion Course: Goldsmiths' College

The one year CDT conversion course, first introduced by Goldsmiths' College has now been running there for seven years, generally taking between 15 and 20 students each year.

It is anticipated that students will teach in both Middle schools and in the first three years of Secondary schools. With further in-service training and Departmental help they should become teachers of CDT at all levels.

The course is structured to equip teachers with the basic skills needed for the teaching of Design activities to pupils with an emphasis placed on an understanding of working with wood, metal and plastics from an Integrated Design approach. It may be appreciated that a one year course must be of an intensive nature and a sample first term's timetable illustrates this.

DAY	am	pm
1	Foundation projects	Foundation projects
2	Graphics	Light Crafts
3	Professional Studies	Plastics Techniques
4	Foundation projects	Foundation projects
5	Wood Techniques	Metal Techniques

Within the timetable the elements of wood, metal and plastics techniques run throughout the year specifically to practise skills and build confidence enabling the student to become competent within the school workshop.

The Light Crafts area of the programme is concerned with the Junior end of the school range with an emphasis on easily worked hand materials including reclaimable products. Although the articles produced include an element of fun within their concept, a knowledge of colour theory, simple mechanisms and a high standard of finish is of paramount importance.

Complementing the studio and workshop activities there are twenty days teaching practice in the second term and the Professional Studies seminars throughout the year are designed to cover topics on all aspects of CDT. The seminars initially outline CDT teaching practices by way of an introduction to the school visits and then develop from the experience of the school practice to tackle further themes and projects.

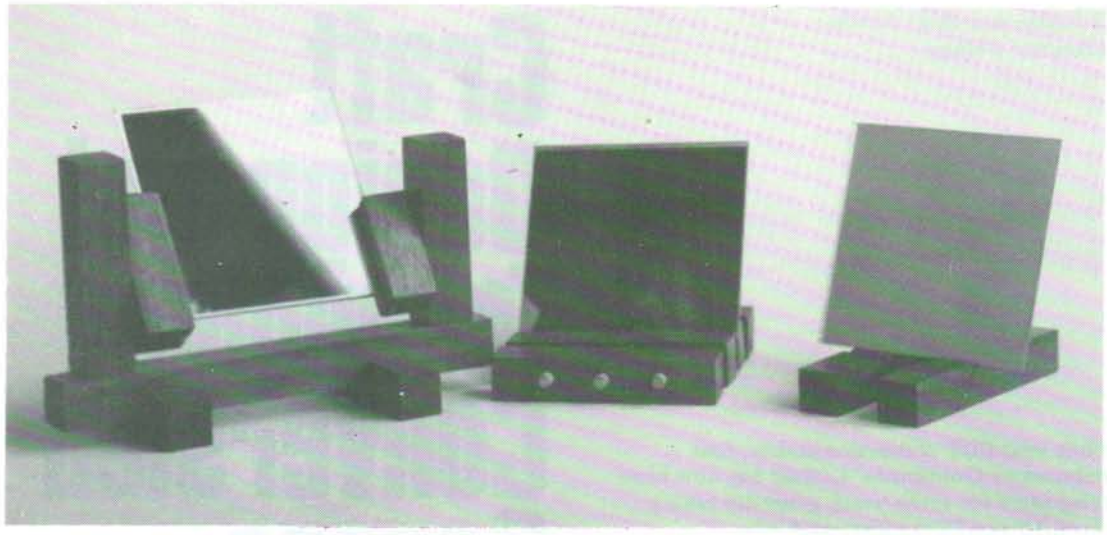
The Foundation work of the first term has evolved from the need for students to understand materials from the start, the forms they may take and the means of forming them. In the planning stage which precedes all the projects undertaken, considerable emphasis is placed on the need to acquire appropriate graphic skills aiding the development of a Design Language and the understanding of Design Methodology. Subsequent practical work reinforces the discipline of workshop craft working prior to analysis and evaluation of the finished product. Through this process students appreciate and experience the need to think logically about problems whilst developing the ability to communicate ideas to themselves and others.

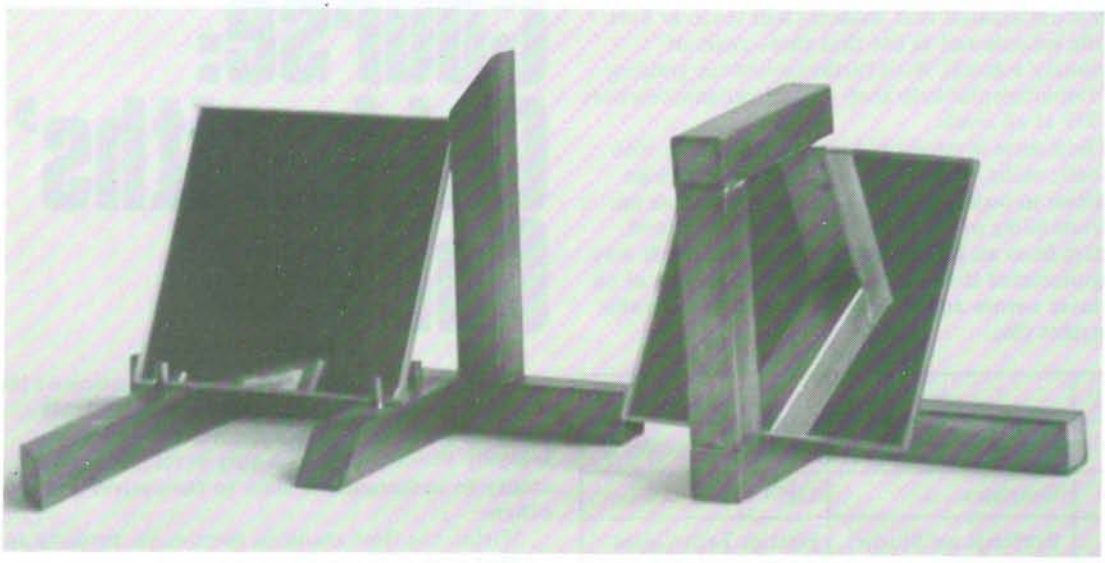
Within the time available five double projects are tackled with the breadth of ideas as a main working criteria rather than a limited functional approach. They endeavour to cover a wide range of materials and processes on a progressive basis and the accompanying text and photographs hope to illustrate this in simple form.

The first term's programme has introduced the students to the following materials: solid timbers, manufactured boards, liquid metal, sheet metal, metal rod, bar and tube, acrylic sheet and tube. On the practical side there has been a wide range of hand and machine forming and the visual experience has covered the arrangement of form in both two and three dimensions. Graphic skills have also been acquired and tested ranging from cutting and pasting paper, through various forms of sketching to simple instrument drawing.

To conclude, the whole format of the programme has been to provide a Foundation for the following term's work and eventual school life.

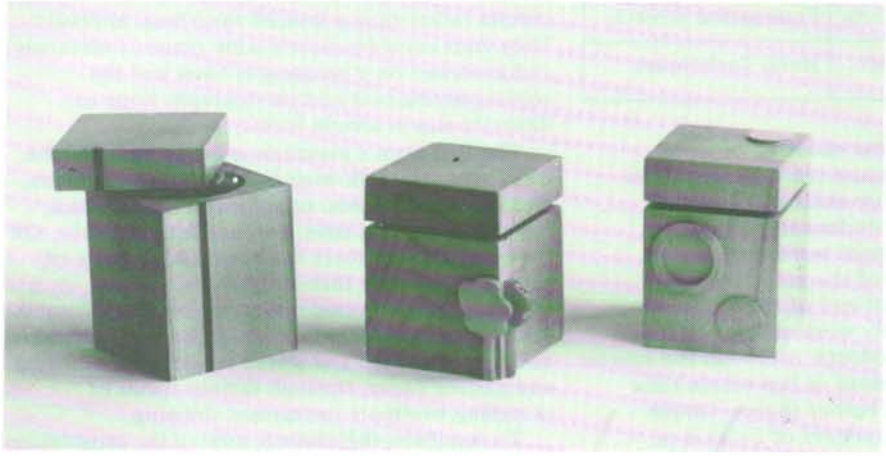
(A further article on the second and third terms of the course will appear in a subsequent issue of *Studies in Design Education Craft and Technology*).





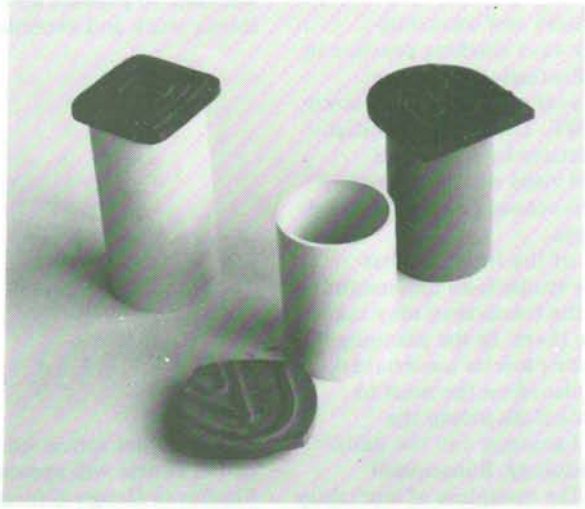
Brief 1 Mirror Support
1A
Materials – Hard Wood 400mm x 25mm x 25mm
Processes – Marking out, Drilling, Fitting and Finishing
Design Source – Rectangular Organisation

IB
Materials – Mild Steel Square Tube 400mm x 18mm x 18mm O 5 Rod
Processes – Marking out, Drilling, Fitting and Finishing, Soft soldering
Design Source – Rectangular Organisation



Brief 2 Small Container with Lid
2A
Materials – 110mm x 60mm x 60mm Fruit Wood
Processes – Marking out, Cutting, Boring, Gluing, Finishing.
Design Source – Decoration through division of Area by Line.

2B
Materials – A PVC tube and Acrylic Sheet
Processes – Marking out, Cutting, Gluing, Fitting, Impression Moulding, Polishing
Design Source – Decoration through division of Area by Line.

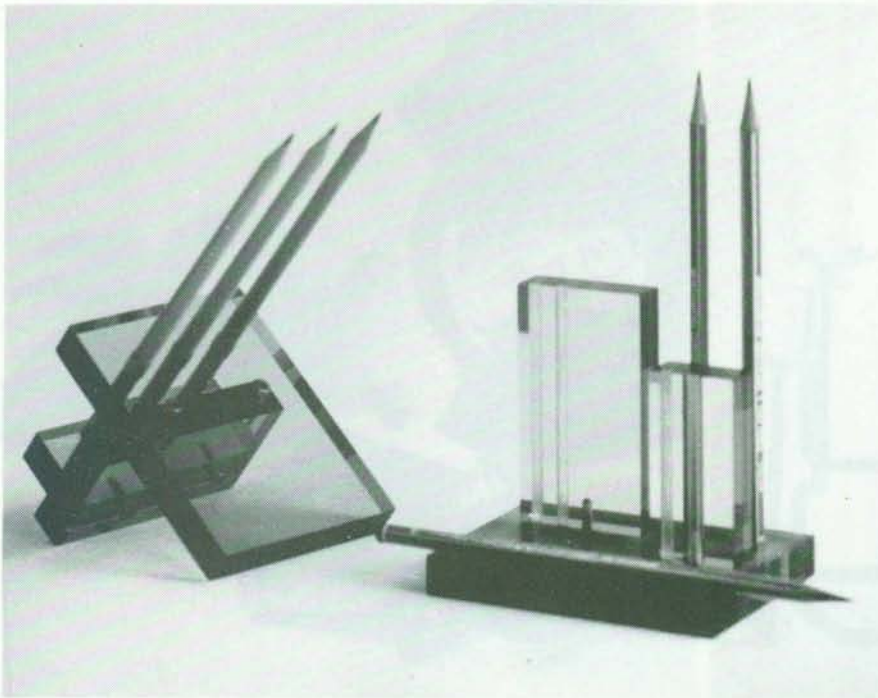


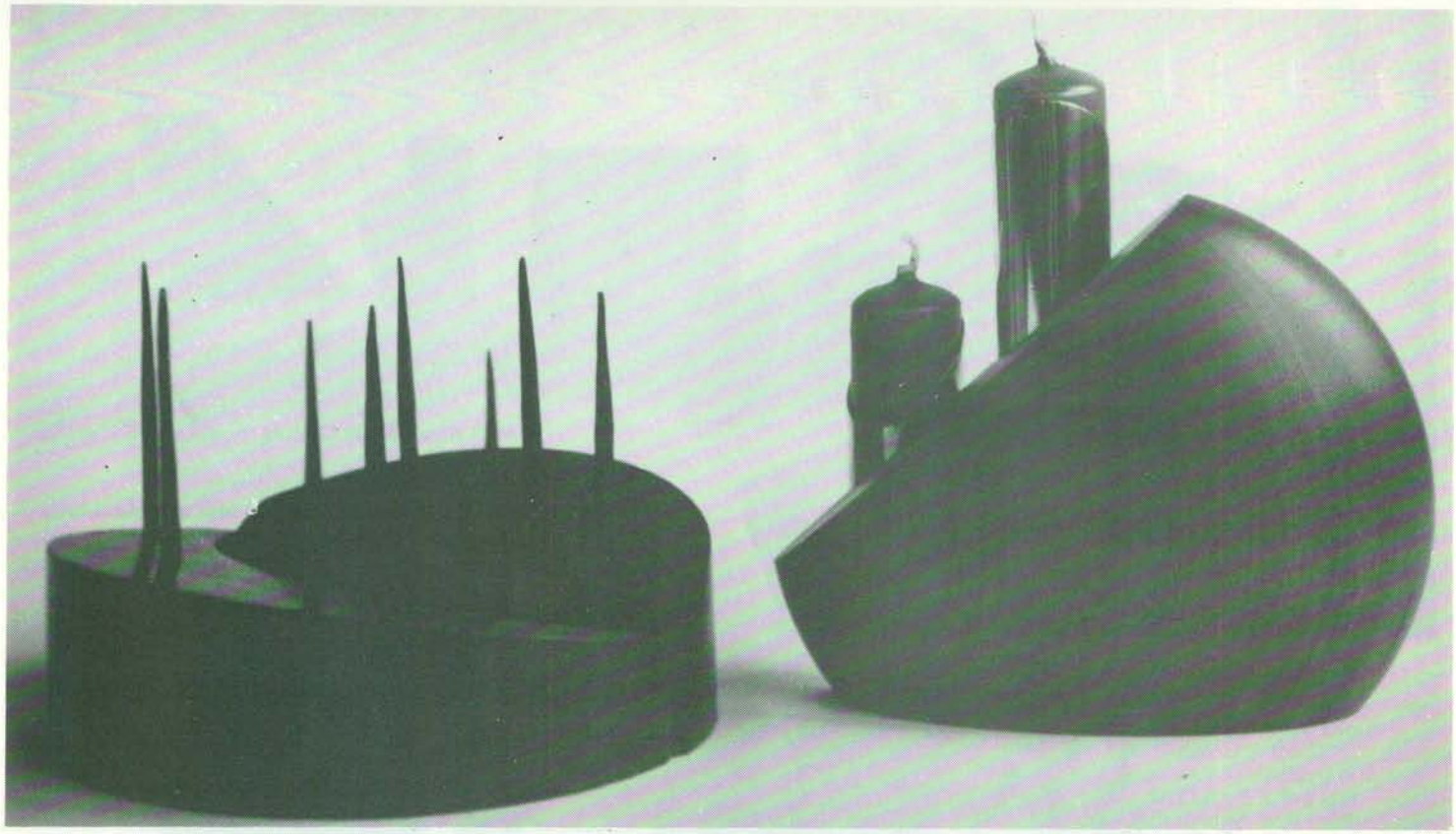
Brief 3 Small Scale Casting
3A
Materials – Aluminium Alloy
Processes – Wooden Pattern Making, Moulding, Casting, Finishing
Design Source – Exploration of Letter and Number Forms

3B
Materials – Pewter Alloy
Processes – Wood and Cuttlefish Moulds, Casting, Finishing
Design Source – Explorations of Letter and Number Forms

Brief 4 Pencil Holder
4A
Materials – 160mm x 80mm x 15mm Acrylic Socket Screws
Processes – Lathe Machining, Milling, Drilling, Tapping, Hand Polishing
Design Source – Three Dimensional Arrangement of Blocks, Machined Surface.

4B
Materials – Aluminium Bar, Socket Screws
Processes – Lathe Machining, Milling, Drilling, Tapping, Finishing
Design Source – Three Dimensional Arrangement of Blocks, Machined Surfaces





Above: **Brief 5 Support for 1-4 Candles**
5A
Materials – Copper Sheet of 20 S.W.G. Wood Blocks
Processes – Silversmithing Techniques, Silver Soldering, Wood Lathe, Turning and Finishing
Design Source – Cylindrical Arrangement

Below left: 5B
Materials – Mild Steel Rod and Sheet Copper 20 S.W.G.
Processes – Drawing Down, Upsetting, Twisting, Bending, Dishing, Planishing
Design Source – Moveable Related Arrangements

Below right: **Light Craft**
Brief – Head or face to have moving parts to include an element of fun
Materials – Ply Wood, Card, Arcrylic Paints
Processes – Hand Tools

Light Craft
Brief – Coloured Hinged Container
Materials – Found Materials
Processes – Hand Tools

All projects are designed on paper using cut card, freehand sketching and simple working drawings