

## Abstract

This case study follows the progress of a cohort of Year 10 students as they engage in a collaborative project over five days inspired by the designer Roger Dean. It exemplifies the way in which different faculties – Design and Technology, Mathematics and Science – can work as one on a project where students need to combine skills from all three disciplines to solve real problems.

## Background information

The Year 10 cohort took part in this challenge. The cohort was divided into two groups. Each group worked on the challenge for a week. Students were placed in mixed teams of 4–6 with a graphics student in each group. Between three to four groups were placed in a base room with the support of two mentors, so that one mentor could continue teaching his/her normal lessons. Each group had a laptop computer with colour printing facilities in each base room. Each laptop computer had access to the Internet via a wireless network.

The workshop facilities were available through a booking system. Each group had a tray of resources. The trays held equipment and consumable items. Each base room had a central store of coloured paper.

## The challenge

What makes a Home for Life?

### Brief requirements

Your team has been commissioned by Roger Dean Ltd to present some design ideas for the interior of a room. This must include:

- models of fixtures and fittings
- a display board.

### Considerations

You need to consider the following aspects of your designs in some detail

- suitability of your ideas for your family
- colour schemes
- lighting effects
- soft furnishings
- storage
- personal items
- suitability of materials
- costing for a full scale room

### Final outcomes

A model of the interior fixtures and fittings which can be placed within a Home for Life room shell.

A display board where you explain in detail how you have met all of the considerations. The display materials will be stored in an A4 presentation portfolio.

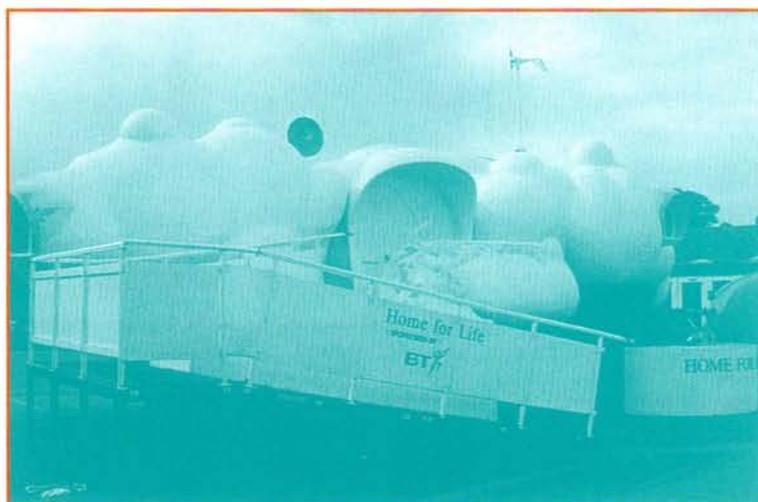
## Day 1

- Mentors introduced the design brief.
- Students viewed the prototype Home for Life.
- Students experimented with modelling materials – polyboard and styrofoam.
- The base room's family scenario was explored by all the groups.
- Research about materials started.

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*Figures 1 and 2: A model of the Home for Life, designed by Roger Dean and sponsored by BT, is delivered to Sawtry Community College for the duration of the project.*



**Day 2**

- Researched the task, materials style, images, lighting etc.
- Initial ideas recorded.

**Days 3 and 4**

- Completed the model making.
- Worked on the display board.

**Day 5**

- Finished the display board.
- Planned and completed the presentations. (Some groups chose to complete their presentations using Power Point.)

Figure 3: Year 10 students work in teams from the outset with a mentor to help them solve the problem of designing fixtures and fittings for the pod.

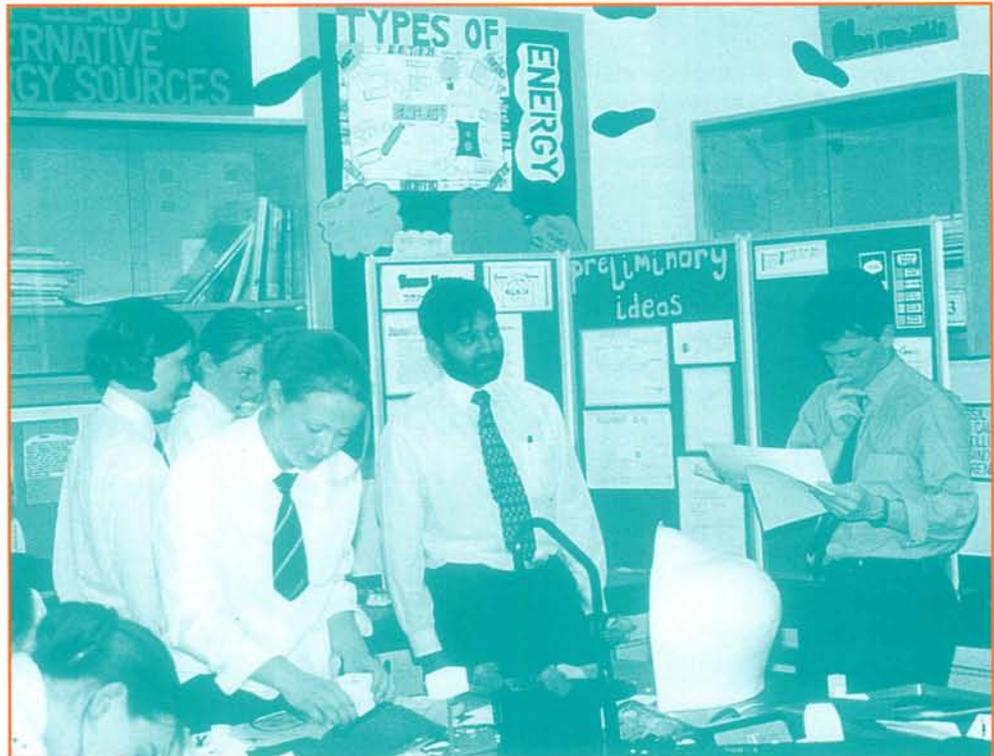


Figure 4: ICT is integral to the project. Through the use of laptops supplied as part of the CAD/CAM initiative students undertake the project.





Figure 5: Each team is provided with a model of the pod which they must furnish appropriately.

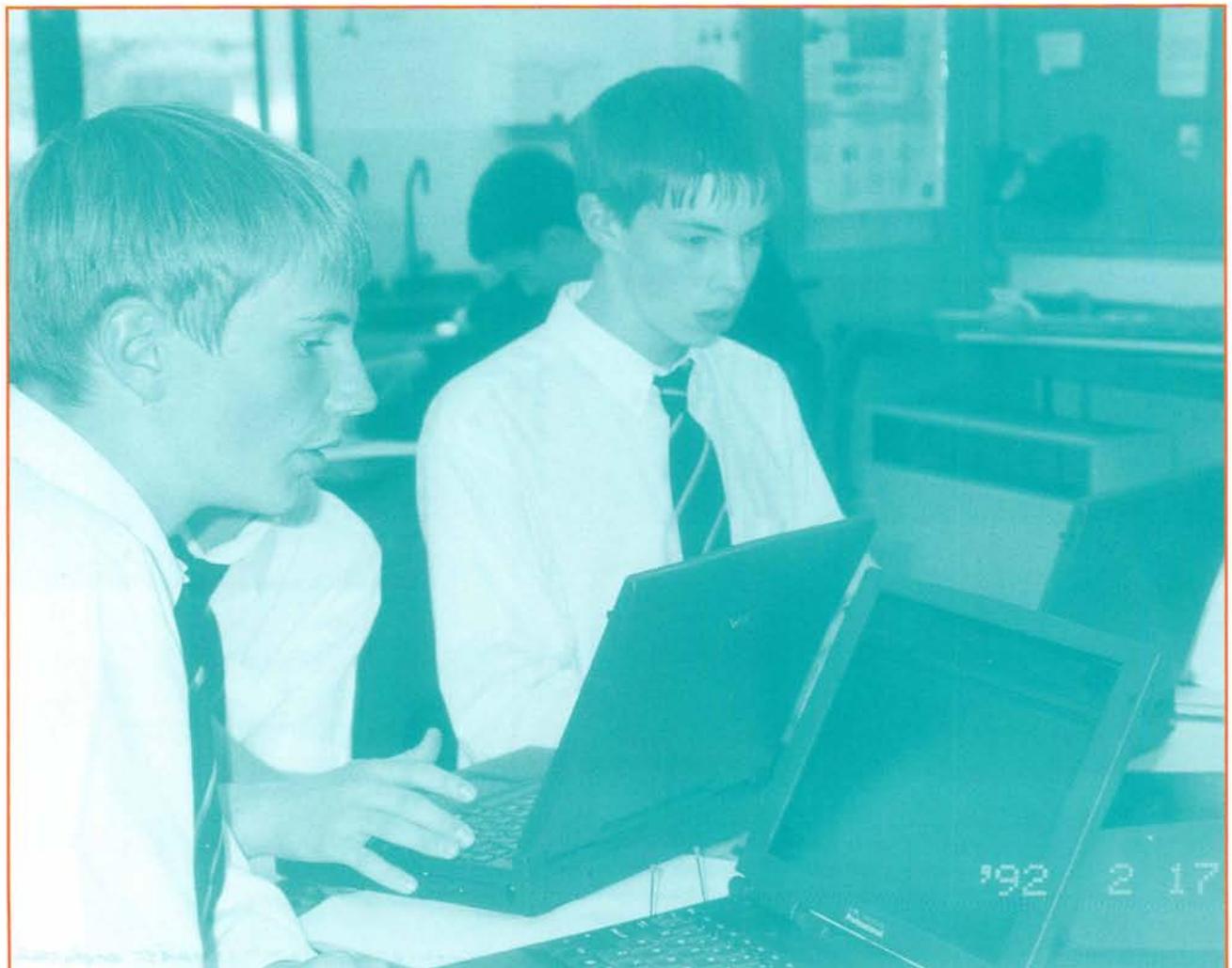


Figure 6: Through digital communications students are able to undertake Internet research anytime, anywhere!

Figure 7: Using modelling materials students develop the fittings and fixtures for their pod.

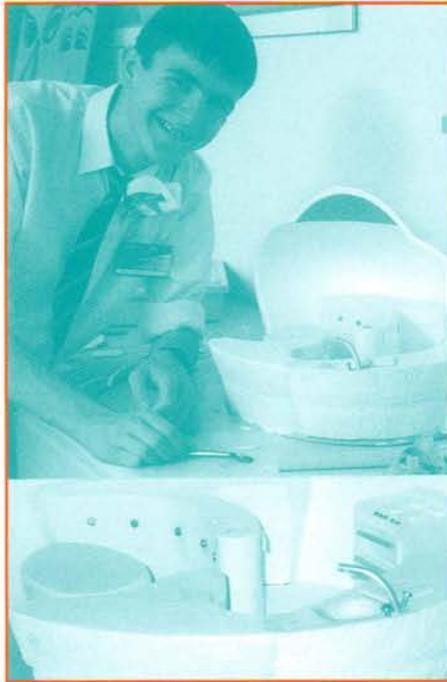
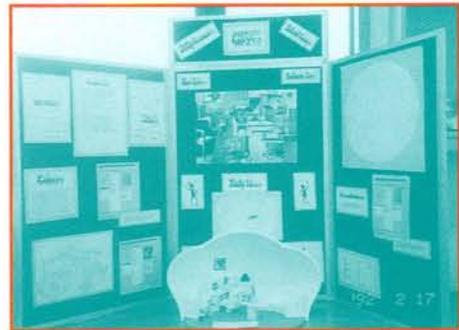
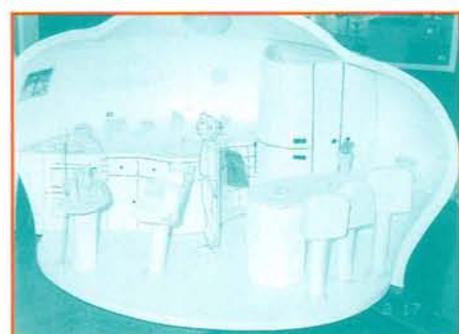


Figure 8: Mentors are on hand to offer advice and intervene when appropriate.



Top: Figure 9: The interior of a living room in a pod

Above: Figure 10: Each team's work culminated in a display explaining how they had met all of the considerations of the challenge.



Left: Figure 11: A kitchen for a pod.

Above: Figure 12: A group presentation.

Work from this project will be on display on Day 1, Wednesday 12th April 2000 at the Design and Technology Millennium Conference, at the London Institute of Education.