



## Project case study at the V&A

Design a polypropylene bag

V&A

DESIGN FOR LIFE

*'The Design for Life project has significantly broken the boundaries of what students achieve in Product Design'*

*Helen Cross, Head of D&T, Eltham Hill College of Technology*



*Duffel bag by Year 10 student, St. Paul's Academy, Abbey Wood, London*

## Design Brief

Year 10 D&T students from Eltham Hill Technology College and St. Paul's Academy, Abbey Wood, London, were asked to create a distinctive bag with a polypropylene shell. This would reflect decorative motifs and structures which had interested them while on visits to the Victoria & Albert Museum. The brief was underpinned by the theme of recycling. Students were asked to 'recycle' and repurpose visual ideas and to use recycled fabrics.

## Designer Input

The brief was set by women's wear designer Holly Cowan, who produces highly structured leather handbags. She is interested in symmetry and structured forms and her designs are frequently inspired by architecture and visits to museums. She worked with the students over ten sessions, including two visits to the V&A and eight practical classroom sessions.

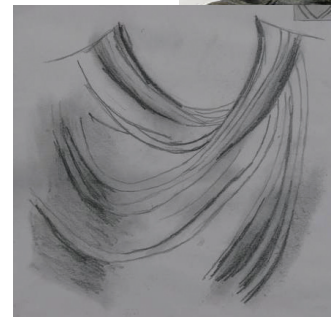
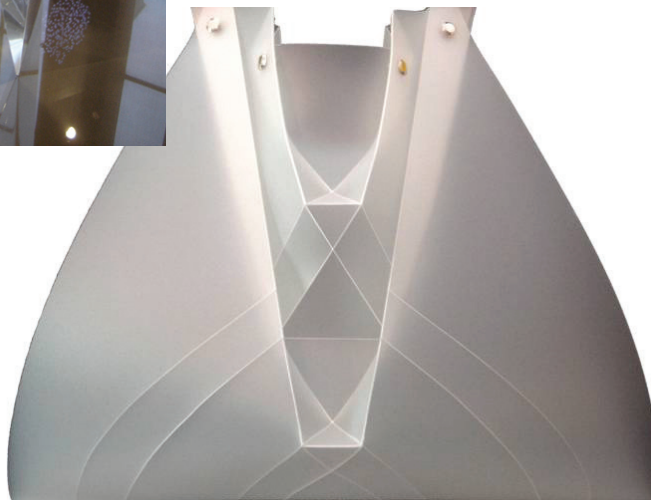
## Inspiration

Students discussed how artists and designers find visual inspiration in museums. They were shown a film in which Vivienne Westwood talked about finding inspiration for one of her fashion collections in the colourful designs on 18th century French porcelain cups. In their two museum visits, students were encouraged to develop their observational drawing skills using a sketchbook. They recorded linear pattern and interesting structures, such as folds in material. They focused on the Ceramics and Buddhist Sculpture galleries at the V&A.



*Left: Ilja Bilek's geometric glass, Wandering Girl (2002) V&A, was the inspiration for Holly Cowan's polypropylene prototype below*

*Right: The carved folds of an ancient Buddhist sculpture inspired the curvilinear designs on this duffle bag  
Image: Buddha, from Gandhara, India, 3rd-4th century, V&A*



### Materials and Processes

At school, the students created inner fabric bags by cutting out and sewing together rectangular pieces of recycled fabrics. They chose different fabrics and sizes to suit the intended purpose and user of their bag. The designer provided simple paper patterns for both large and small 'shopping' bags and duffle bags with a circular base. Next, the students used the drawings they had made at the museum to develop their patterns and transfer these symmetrically onto tracing paper. A sheet of thick, transparent polypropylene was placed over the drawing so the lines of the design

could be carefully incised. Students discovered that by incising alternately from the back and then from the front of the polypropylene sheet, the lines created could be pushed out more easily to make interesting 3-D shapes. The polypropylene was attached to the fabric bag with post screws and rivets. Students decided on type and length of handles and whether to make them from leather or fabric. The handles were also attached with rivets. Cord ties were inserted into the duffle bags. Finally, students sewed down the top hem of the bag for a professional finish.

### Outcomes

Students used the project to fulfil modules of the OCR GCSE Product Design course. Their mock GCSE results were an average two grades higher than predicted. Here are some of their comments:

*'It was good going to the museum; you get lots of ideas – it's better than just sitting at the computer, looking at books and stuff,' Natasha*

*'I was really pleased how my bag turned out. Much better than I thought. It was hard work though,' Ceci*



Left - top to bottom:

- Attaching the bag pattern to recycled fabric
- Sewing up the inner fabric bag
- Developing linear patterns from sketch book to tracing paper
- Incising the polypropylene pattern
- Attaching polypropylene shell to fabric bag with post screws
- Punching and rivetting leather straps to create handles

Below: Completed bags on display at Design for Life's national exhibition at the V&A



**Tips on running a project like this**

**Developing a sketchbook habit**

Using Buddhist sculpture as a starting point for handbag design opens students' eyes to the fact that designers can take visual inspiration from anything. They need to learn to sketch and document their sources of inspiration very carefully so that the qualities of the object that caught their attention can be reflected in their design.

Show students examples of designers' sketches and scrapbooks and study how they record their ideas and sources of inspiration. You could look together at the Design for Life film 'Meet the Designer'. Encourage students to use sketchbooks frequently and build up their skills with simple observational drawing activities. For more drawing activity ideas see the V&A resource Drawing in Museums listed below.

**Manipulating polypropylene**

It can take some practice to score polypropylene with a craft knife without cutting right through the material. Order enough polypropylene to allow each student a trial piece to practice on. It is best to use thicker polypropylene (5mm) as this will make the shaped 3-D forms more robust.

**Further links**

**Design for Life resources**

Toolkit for teachers: engaging young people in design by working with museums and professional designers.

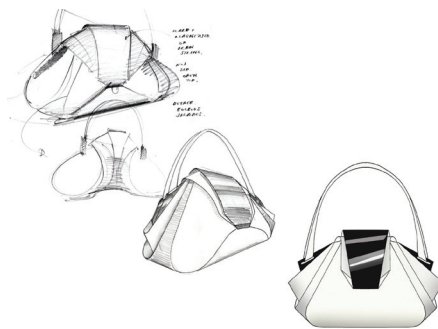
**Design DNA**

A questioning framework to help young people critically analyze design objects.

**Ideas collector**

An attractive format on which young people can draw and collect ideas on a museum visit to use as later inspiration.

Download all Design for Life resources from [www.vam.ac.uk/dfresources](http://www.vam.ac.uk/dfresources)



*Detail from Holly Cowan's sketchbook*

**The V&A channel**

This features a number of interviews with designers talking about their design process and inspirations – often works in the V&A collections [www.vam.ac.uk/channel/](http://www.vam.ac.uk/channel/)

**WebQuests**

Discover thousands of amazing objects from nine national museums and galleries. Choose from a range of challenges to do in the classroom or as homework, which support learning in design and other subjects at different key stages.

[www.nmolp.vam.ac.uk/webquests](http://www.nmolp.vam.ac.uk/webquests)

**Creative Spaces**

See the video of Vivienne Westwood talking about her inspiration at [www.twc.nmolp.org/creativespaces/?page=video&vid=twc-23](http://www.twc.nmolp.org/creativespaces/?page=video&vid=twc-23)

**Drawing in Museums: Teachers' Resources**

This can be found at [www.vam.ac.uk/schools](http://www.vam.ac.uk/schools)

**Search the Collections**

The V&A's easy to use search engine which enables you to search for relevant works or designers under many key categories.

[www.collections.vam.ac.uk/](http://www.collections.vam.ac.uk/)

**Design Lab**

The V&A's programme of design workshops for schools [www.vam.ac.uk/schools](http://www.vam.ac.uk/schools)



department for culture, media and sport



This Design for Life resource was developed as part of a national museums' partnership, led by the Victoria and Albert Museum, which sought to engage young people in design through using museums. Design for Life was funded by the Department for Culture, Media and Sport, the Department for Education (2008-11) and the Museums, Libraries and Archives Council (2010-11) as part of the Strategic Commissioning programme for museum and gallery education.