

Melbourne Now for VCE Product Design and Technology

Key curriculum links

Students will investigate:

- approaches used by different designers to incorporate sustainability practices in product design
- the product design process and its application to redesign and production of a product based on an existing product design
- creative and critical design thinking methods and techniques
- social, economic and environmental issues of sustainability related to design
- methods of researching, developing and presenting design ideas
- historical or cultural design movements or styles and how they inspire new product design
- annotations in visualisations (concept sketches and drawings), working drawings
- the role, purpose, structure and components of a design brief, including context, constraints and considerations
- new and emerging technologies and their influence on design
- different scales of manufacturing systems
- how designers, manufacturers, users and owners prioritise and place value on product attributes and how these vary over the life cycle of a product
- key factors and aspects that determine the quality of a product.

Overview

Within *Melbourne Now* are a number of smaller exhibitions in which design, creativity and technology are the key features. *Melbourne Design Now* showcases industrial, product, furniture and object design from Melbourne designers and design studios, with themes of the economy, social culture, sustainability, the human body and visual culture.

At The Ian Potter Centre: NGV Australia, the Design Wall, a giant wall installation 7 metres high and 15 metres wide, displays thirty design projects that represent design in everyday life, with interactive tablet displays that document aspects of design development and production. The design projects are colour-coded according to theme, and for each theme an exemplar has been selected. These include the direct-to-brain bionic eye developed by Professor Mark Armstrong and the Monash Vision Group, which allows blind users to make out objects and people with the aid of a brain implant, and world-class digital film cameras and video editing products from Blackmagic Design.

Another exemplar is the award-winning Bolwell *EDGE* caravan – the latest stage in caravan evolution, incorporating cutting-edge materials and aerospace technology. Sited in the Grollo Equiset Garden at NGV International, the caravan is the working studio of a different designer-in-residence each week for the duration of the *Melbourne Now* exhibition, presenting a valuable opportunity for students and teachers to meet practising designers, ask questions about their creative and critical design thinking and observe how they communicate design ideas.

A display of innovative furniture and lighting explores how local designer/makers push the boundaries of materials and form. Dale Hardiman's *Kid's straw stool*, made from pea straw and grass seeds, is designed to be placed into nature once it reaches

the end of its life, and not only biodegrade but also grow and help improve the health of the land. Marc Pascal's playful lighting uses various combinations of plastics, rubber, technical gypsums, ceramics, metals and glass. Employing techniques that include rotational moulding, blow moulding, slip casting, dye cutting, dyeing, and hand weaving and casting, Pascal's pieces walk the line between art, craft and commercial design.

In *Designer Thinking* – another exhibition within an exhibition – the different conceptual and practical approaches of a number of emergent local fashion designers are explored in an installation of street wear and formal wear, combining the utilitarian and the sculptural.

Susan Dimasi from fashion label MaterialByProduct occupies a gallery space, weaving on a custom-made loom in response to fabric samples from the NGV collection and surrounded by examples of garments that show the development of different lines of production from artisanal to ready-to-wear.

Demonstrating new approaches to the design of existing products are jewellery designers and shoemakers. Working in a variety of materials, designers playfully explore form, line, colour and the relationship between the object and the wearer.

Ideas of sustainability are evident in the work of many of the exhibiting artists and designers. The work of award-winning designer Leyla Acaroglu is presented as an exemplar for its focus on the global and social impact of design and technology, with emphasis on sustainability and product life-cycle assessment.

The Secret Life of Things is a series of animations – commissioned in partnership with the Design and Technology Teachers Association (DATTA) specifically for design and technology students – that promotes environmentally sustainable decision-making in design and product development. *Design Play Cards* is a deck of fifty playing cards made to challenge, inspire and inform young designers about opportunities for sustainability in product development.

Sustainable design underpins the thinking of Urban Commons, a design studio committed to reshaping urban spaces through the integration of product,

landscape and communication design. The *Urban Commons foodscape* in the Grollo Equiset Garden at NGV International invites visitors to change the way they think about landscape design and food production.

The projects mentioned here are only some of those that may be of interest to Product Design and Technology students. *Melbourne Now* contains many more opportunities for inspiration and engagement.

Starting points for discussion

Visit the Design Wall and the design case studies at NGV Australia.

- Choose an object of design and identify how design elements – point, line, shape, form, tone, texture, colour and letterform – and design principles – figure-ground, balance, contrast, cropping, hierarchy, scale, proportion and pattern – are used.
- How do the qualities of the materials used contribute to the function or appearance of the object?
- What do you think was included in the designer's brief?
- What can you find out about the production process for the object?
- In what ways has the object improved on previous designs of the object?
- Think about the different stages of the object's life cycle. In what ways would the object impact on the environment?
- How has technology impacted on the design and manufacture of the object?

Before your visit, prepare a series of interview questions for an artist or designer working within the exhibition. You might include questions about idea generation and presentation, the design process, working methods, dealing with clients, materials and production, and sustainability and life cycle assessments.

Suggested artists/projects

Some artists and projects related to Product Design and Technology are listed below, but there are many more. You can use the *Melbourne Now* microsite or app to find more information about these artists as well as a map showing the location of their work. You might also like the *Design, Fashion and Art and Science* tours on the *Melbourne Now* app.

NGV International

Bolwell EDGE caravan, 2010

Contemporary Jewellery

MaterialByProduct (Susan Dimasi)

On Top of the World: Flags for Melbourne

Preston Zly Design

Cameron Robbins

Shoemakers

Urban Commons

Zoom

The Ian Potter Centre: NGV Australia

ARM Architecture

Designer Thinking

Melbourne Design Now – case studies

Melbourne Design Now – Design Wall

Sampling the City: Architecture in Melbourne

Offsite

On Top of the World: Flags for Melbourne