

Product Design: Design briefs and specifications



Design briefs

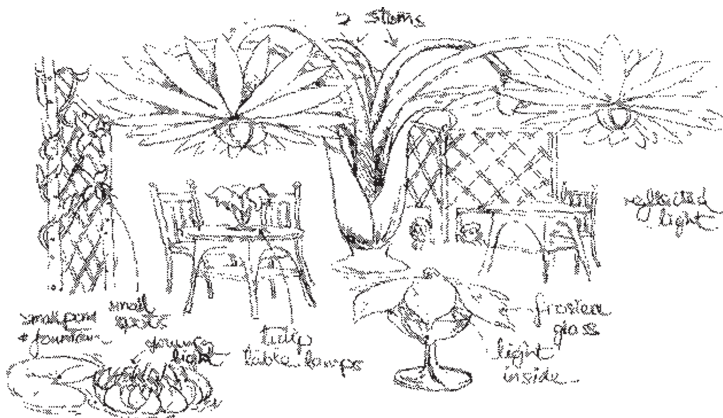
A design brief is a short statement which describes some or all of the following:

- ▲ the product to be made and its purpose;
- ▲ who will use it;
- ▲ where it will be used;
- ▲ where it might be sold.

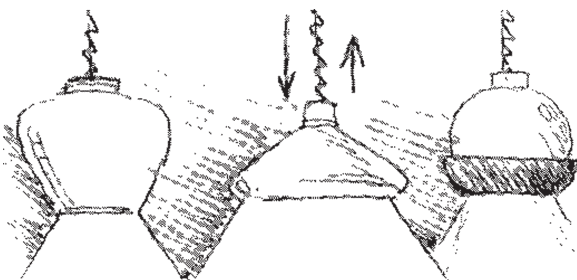
An **open** brief provides general guidelines and offers the opportunity for a wide range of possible outcomes. A **closed** brief is more specific and detailed in its requirements. Here are examples of open and closed briefs for two lines of interest.

Lighting

Open design brief: Design a lighting system for a new restaurant called the Garden House. It will seat up to 80 people at 20 tables. It has country gardens as its theme and it aims to attract shoppers and families during the day.



Closed design brief: Design a ceiling-mounted, rise-and-fall light that casts a warm glow on a round table of diameter 2m. It is for a restaurant that aims to attract couples and small parties for 'special occasion' evening meals.

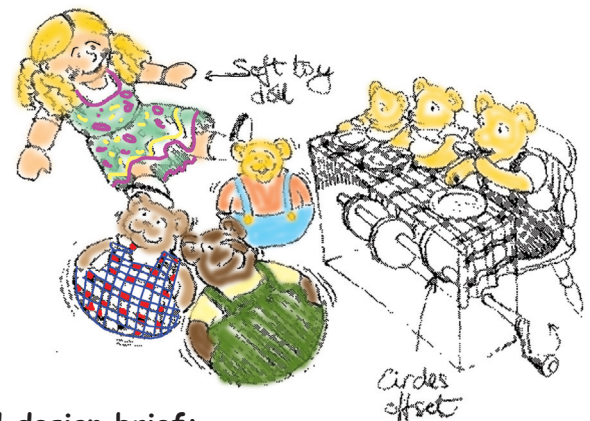


The open brief provides the designer with freedom to explore and create a wide range of possible lighting effects.

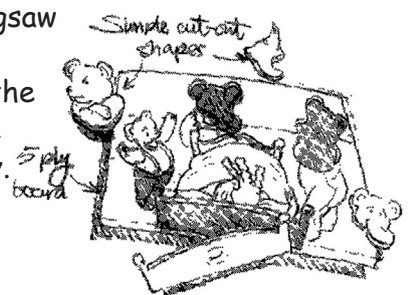
The closed brief provides opportunity for different solutions, but the nature of the product is more clearly defined so the range of possible outcomes is limited. A particular lighting effect is required and there are only a few ways this can be achieved.

Toys

Open design brief: Design toys based on the story of "Goldilocks and the Three Bears" for children of primary school age. They are to be sold in a wide range of outlets: specialise toy shops, department stores and Woolworths.



Closed design brief: Design a wooden jigsaw for infant school children based on the "Goldilocks and the Three Bears" story. It is to be sold in craft shops that specialise in hand-made toys.



A range of toys is possible from the open brief including traditional dolls, mechanical automata and computer games.

In the closed brief the product and construction material are specified and the end user is more clearly identified. This provides a more detailed picture of what is required.

Specifying the product

You will need to develop the design brief into a **performance specification**. This will provide a list of criteria against which you can assess your design as it develops.

The performance specification will always;

- ▲ describe what the product has to do;
- ▲ describe what the product should look like;
- ▲ state any other requirements that need to be met.

For example:

- ▲ how it should work;
- ▲ how much it should cost to manufacture;
- ▲ possible production levels – one-off or batch production;
- ▲ what materials it should be made from;
- ▲ what energy source should be used if it needs to be powered;
- ▲ legal requirements to be met in its development and use;
- ▲ environmental considerations and requirements.

Here are two examples of performance specifications and products that meet their requirements.

Infant school bench hook specification

What it should do:

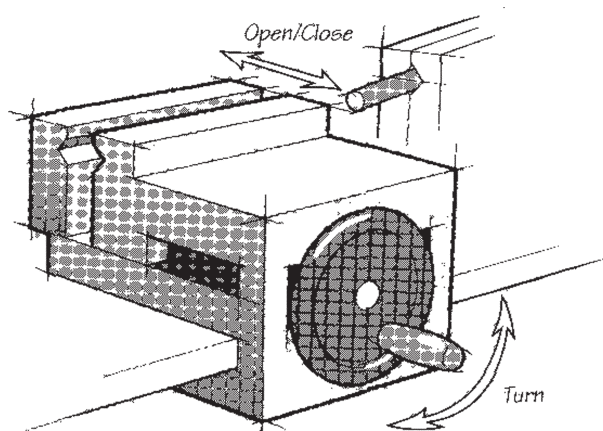
- ▲ hold secure a range of round/square section materials (timber/plastic) to allow for safe cutting;
- ▲ be fixed to classroom table/desk and removed easily when not in use/needed.

What it should look like:

- ▲ a robust, but friendly tool;
- ▲ attract user because it looks easy to operate;
- ▲ line, shape and colour scheme to compliment general classroom environment.

Other requirements:

- ▲ must be safe and easy to use by young children and inexperienced adults;
- ▲ must not endanger non-users in a general classroom situation;
- ▲ must be adjustable and accommodate a range of materials up to 25 mm X 25 mm;
- ▲ cramp/holding device should be easy to lock and release. Young children should be able to hold material secure with minimum force;
- ▲ all components should be attached securely so that they do not become separated and lost.



What it has to do:

- ▲ be suitable for male/female wear for a party or celebration;
- ▲ be part of a range of low-cost fashion jewellery that can be mixed and matched to coordinate with evening/party wear;
- ▲ meet the aesthetic needs of a young person aged 17–25.

What it should look like:

- ▲ be based on geometric forms with reference to Egyptian art and design;
- ▲ reflect the mood/style of a fun-loving young person.

Other requirements:

- ▲ must be easy to manufacture for batch production;
- ▲ should use low-cost materials, recycled if possible;
- ▲ should be seen as an evolutionary range of jewellery with opportunity for regular style changes and special/limited edition products (like a Swatch Watch).

