

Example of a **detailed** design problem and brief. Note that you are not required to provide as thorough a description.

INITIAL INVESTIGATION OF DESIGN CONTEXT

DETAILED DESIGN PROBLEM

I have discussed the key aspects of the design problem / task with my client. I have written a detailed description of the design problem below (the problem I intend to solve).

My client, a local company designing and manufacturing children's games have recently found that sales of its games have fallen. Without an increase in sales it is likely that the company will stop trading.

In the past the company has relied on its existing traditional (old fashioned) games. These helped the company to be successful for many years. However, the likes and dislikes of children have changed over the years and the company now finds that its products are not as popular as in days gone by. Their existing games are out of date.

A recent survey has shown that modern, educational games are popular. The survey also shows that the most popular games include well known characters or are linked to well known TV programmes. Small scale games rather than large board games are the most popular.

It is also well known that parents tend to buy games that are educational rather than the traditional games that the company currently produces. A focus group has suggested that the new range of games must be of interest to both children and adults/parents. Many of the traditional games manufactured by the company are targeted at either a young market or an older market, not both. Furthermore, parents prefer to buy games that help the development of their children. This includes hand / eye coordination, reading, colour and shape identification and walking.

DETAILED DESIGN BRIEF

I have discussed how I intend to solve the design problem and what I intend to design, with my client. This is written below as a detailed design brief.

I am going to design and make an educational game for young children that will encourage the development of hand - eye coordination skills.

The game will include movement, sound and lights through the possible use of a programmable circuit and mechanisms.

The game will encourage children to develop hand / eye coordination, learn about letters and numbers, enhance reading and investigation skills, all through interesting themes.

The game will be robust and strong so that it can stand up to everyday use. It will be packaged or stored in a sturdy purpose made container. This will ensure that parts will not be lost or left lying around. The container or packaging will be attractive as well as functional and display clearly the name of the game.

Natural materials such as pine will be used as well as modern materials such as plastics. Recycled materials will be used where possible. Reclaimed components and parts will be used, where appropriate.

All safety standards will be applied to the finished product and the prototype will be rigorously tested before the game is manufactured at a large scale.

The device will be safe and easy to use and interest parents as well as children.

It will be relatively cheap to make and it will be possible to manufacture on a production line.