

Year 10

Design Challenge



Design for Accessibility



Ergonomics in Product Design Peter Gurfing & Sam Banker-Smith

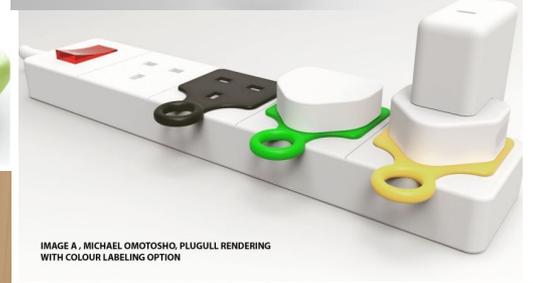


IMAGE A, MICHAEL OMOTOSHO, PLUGGULL RENDERING WITH COLOUR LABELING OPTION





Context

Designers are employed to find solutions to a need. This is often a need for a product that will help another person have a better life in some way or another.

In design there is ALWAYS a user in mind. Without a user, there is no demand and therefore no need and ultimately no point.... AND no money, because a dud product is no use to anyone!

My first slide contains images of products that have been designed for those with accessibility issues such as the elderly, those with arthritis or those with a disability. Notice that they are designed to help that person overcome their issues so that they can lead a relatively normal life



Your task

Your task is to initially identify a need. If you can't think of one, accessibility is always a good one and there are plenty of designs to find online that will help to inspire you - or it may be that you know somebody who really struggles to do something, who you could use as your 'case study'.

Once you have identified a need, begin researching existing product designs. I suggest you find six that you like and then I would like you to analyse these products in terms of what you think about the way they look, their function, the materials used in their production, their cost, size etc. This should be presented with a picture of each product with paragraphs of analysis underneath each one.



Design brief and Specification

1. Write a design brief for this project. Outline in your brief what you intend to design and who you intend to design it for. It doesn't need to be really long, but it needs to cover the points I have raised.
2. Now write a detailed and justified specification as to what the product needs to have, or be, in order to be successful. You should consider how your product will look, its shape, size, function, ergonomics, possible materials used, cost, sustainability issues, manufacturing etc. Your specification should be a list of detailed sentences that also gives reasons as to why your product should be a certain way... for example... *my (product) will have to have a way in which people with limited use of their hands can hold it comfortably while it still being able to perform its function in the manner intended. This is because my users are unlikely to be able to grip something able bodied users can*



Design ideas

Now produce a wide range of initial sketches and ideas of potential products

These should be presented neatly using colour and annotation as necessary. All design work should be presented on a bordered A3 sheet of plain paper preferably and should have a bold title - initial ideas

Evaluate each idea against your specification. Does it meet the needs of your user? Have you considered what you outlined in the specification? How might you develop it further in order to meet the needs of your specification?



Developed Ideas

Choose the best of your initial ideas to take forward and develop further.

Produce more drawings, this time in more detail, showing how you have developed your ideas. You could show exploded views of your idea to demonstrate changes made or maybe do cross sections or close ups of certain parts.

You can also model ideas at this point, making models from cardboard or other materials found around the house. Photograph your models and add them to your body of work, with annotations.

Again, evaluate how each design meets the specification and brief and choose one design to go forward



Final Design

Do a full colour drawing of your final chosen design. Title, Final Idea. Explain in your annotations why you chose it and how it meets the brief and what you like about it.