GCSE Design & Technology

Multifunctional Living

Molly Gould

Candidate No -

Wrotham School - 61687

Design Challenge Analysis

- A- The product will have to be visually appealing as well as carrying out the multiple purposes it is designed to do
- C- My product will have to be a reasonable price so it is more appealing to people to purchase and match its visual value.
- C- The product will have to be tailored to my chosen client so it will be helpful in their chosen usage.
- E- Depending on what my clients needs are to base my product on will determine wherever it will be used.
- S- Before handing the product over to my client it will have been tested to see if it carries out its purposes and wont break when used.
- S- Depending on what functions the product will have to carry out will determine how big the product will be.
- **F** The product will have to have at least two functions to be multifunctional. To have four functions would be a suitable maximum limit.
- M- If I were to make something strong and withholding to be used in a home, I would use materials like wood because its chances of breaking are extremely low.
- Q- To ensure high quality I will have to use trustworthy materials and carry out many safety/ control checks.
- S- I could use environment friendly materials to make sure there is no long term harm on the environment & ensure what I am making is strong enough to last a long period of time



Multifunctional living is products having more than one purpose. This could be a coffee table to hold drinks but also has storage so items that need to be put away can be in an easily accessible place. This makes home life more easy and convenient as it saves space and cost.

MDF.

proof

Very high

quality

Reading, Cooking, DIY work

Displayable, Hidden, Cupboard door, Draws

Photography, Art, Technology

Indoor or Outdoor use

Weather/water



Simplistic & easily used

Sofa, coffee table, book shelf, chair, tables, storage, shelfs, desks

Modern, retro, antique.

How will it be unique? I will try to use colour and shape to ensure it is very different to other products that are made which will also ensure that is tailored for my clients life and personality.

Bedroom, Lounge, Kitchen, Study, Bathroom, Hallway

> Constant essential use

Colourful

Unique & suitable for my client

Smart, technology, innovative, cleaver

Multifunctional Living

To store; books, boxes, clutter, toys, art supplies, crockery, utensils, wires/cables, decorations.

Expandable

Connectable

Combining 2 in 1

Durable

Enjoyable

Purposeful

Time/Space saving

Safe & secure

Eat/Drink/Culinary

Big - smallAffordable

Attachable/

Detachable

Quick

& easy

Appealing

Fun

take? At least a year for the whole process, to ensure everything is to the highest quality

How long will it

Comfortable Convenient Daily Ply wood, use Store/ acrylic, Hold

Where will I do my research?

Once I have my client I will evaluate their home space, this is to see what would be suited to design for them. I would also ask them about their home life and what they like to do to have a good understanding on their needs & wants.

> Summary - This slide is my analytical view on the design challenge. This will help to start the whole process and give myself, as the designer, a more better & deeper understanding on multifunctional living. I know the things to take into consideration and make sure it is carried out with detailed precision



Living Space

They are made multifunctional because it makes home spaces more easy & convenient



Company's who have designed houses have them open plan so that things are more accessible and convenient. This ensures that homes are more spacious so that a multifunctional purpose can be carried out. Companies do this so things within the home like furniture can be put in without making the living space hard to move around in



These are mainly seen in living rooms and kitchens because these are the places that can easily be cluttered and are the most lived-in places

Summary – This slide is looking into the different interpretations of Multifunctional Living and how they are used. These are Living spaces, Furniture & Products. This is to show the different contexts my product could be used within. I now have a more indepth understanding on the ways that I can design a multifunctional product for my client.

Research: Design Possibilities



These can be very useful in homes because it saves money and space. It means that the home can be spacious and have a modern look. However most multifunctional furniture is bespoke made which is why this deign challenge is so interesting

Furniture that has multifunctional purposes tend to look very modern and are made from modern materials which tend to be very neutral with very few colours . This is so it is aesthetically pleasing because of how simplistic it looks.



An example function would be something with storage. As shown above there is a side table that can also house pets. This is a useful piece to have in your house because not only can you display things above, you can also put away items that could be cluttered somewhere else in the home.



Furniture



Products





These are usually two products that have been put together to save buying them each individually. This is could be more easy for smaller living spaces because when things are needed to be stored there is more space because two products are made into one.



These products could be electronic or something with a more simple requirement. These tend to have more colour to make it seem more appealing and unique.

The image above shows a good example of a multifunctional product. The lamp base has space to store a plant and stationary, meaning that there are three functions being carried out. This means that there will be more space on the desk it is placed on making the clients home more neat and functional.





Coffee Table that has many storage compartments

Modern Style: Featuring a clean rectangular silhouette, it delivers the trendy mix of black and white that gives your living room a modern, mannered vibe.

This would be ideal in a home with small children as it provides space to store things, such as toys, which could take up a lot of floor space in a main living area where the coffee table would be placed.

When first looking at it, it seems very sleek and high quality. It looks like it can store many items at once which can be very helpful if you have a small living space. The materials used look very complimentary against each other & are obviously very durable if they are having to hold a lot of items at once



Summary - I have chosen to design a piece of multifunctional furniture, so on this slide I have chosen three pieces of multifunctional furniture & analysed them. This will help my client & myself as the designer to decide what type of furniture to build. It helps me think of things to consider such as colour, material and functions it may carry out

A coffee table that can convert into a desk & reveals extra storage

This product has thee functions, instead of two which is what most multifunctional pieces of furniture have. As well as being a coffee table that can be converted into a desk, it also has a small storage space underneath the desk surface. This could be used to store away any clutter or thigs like files, books or electronics that a person working from home may need. This also enables work to be done in the comfort of your own living room, which creates a more comfortable and happy space.

This piece of furniture can be very convenient to a person who may have at work at home or frequently uses a laptop. Whenever it is not needed to be used as a desk it can be easily folded away to show a modern coffee table. This means that space & money can be saved here. If you have a small living space they there is no need to create a cramped space which also saves money being spent instead of saved.

Existing Products

6577019752393449/

https://www.pinterest.co.uk/pin/51



This is a very minimalistic looking piece as it isn't as big or bold as others. Although it can be easily tucked away it can be very useful for people who work from home or students who study. This is because you have a surface to type or write on, but also a very close convenient space to keep files or text books.

The tre table was designed for residential use and I inspired by a piece of toast... yes seriously. Designed to simplify life with its curvy contours and compact versatility making it perfect if you live in tight quarters.

A "tre table" that can hold books / magazines

https://www.mad aboutthehouse.co m/five-findsmultifunctionalfurniture/

https://www. isaackrady.c om/tre

The shape of the tre table is very unique but flows well with the purpose of the product. I also like the way that the grain of the wood follows the curves of where to books sit. I think that it would be at an affordable price as it is very modern and a simplistic addition to the home, but not to low that its high quality finish is overlooked.

 ${\bf Me}$ – Hello Madison, thank you for letting me interview you. I will be asking just a few short questions around the multifunctional piece of furniture I will be designing for you.

Client – Fabulous. I'm happy to help your designing process out.

Me – Firstly, what sort of size furniture would be most convenient for you?

Client – Something small, I have a limited bedroom space so it can't take up too much room.

Me – Okay, would it be more ideal if the price range was lower?

Client - Yes, I don't have much money as I have no part-time job.

Me - What sort of finish/style would you like the piece of furniture to have?

Client – I like the look of antique, rustic looking products. So something in that style would be nice.

Me - Very nice, how many functions would you like to see carried out?

Client – As many as you see fit.

Me – Very interesting. Okay so what functions would you like the product to carry out?

Client – Somewhere to sore my electronic devices or stash snacks I like to keep in my room. Or perhaps a surface to complete my school work.

Me – Is there any specific colour or shape you would like to see the furniture have?

Client – I like darker colours, so perhaps black or navy blue? I don't have a preference to the shape, as longs at it has some sort of surface.

Me – Would you like specific features? Like a closed compartments, or a shelfing unit? **Client** – I would like some storage, but I wouldn't like it to be open, I prefer it to be more secretive.

Me – Finally, do you own any multifunctional pieces of furniture already/ do you think this would be more convenient for your lifestyle?

Client - I don't, but I do think it would be better for my living space.

Me – Thank you for you time Madison. This was very helpful for me to know the things you are looking for in the product.

Interview

Target Market and Client Profile and Interview

Summary – This slide shows details about my client that helps me find things that will be convenient to base my piece of furniture off of. It gives a detailed account on things about my client, such as their interests, their occupation and the things that the do within their home. I have also interviewed my client, this because I now have better and more detailed knowledge so my furniture piece will be perfectly tailored around my clients lifestyle.

Client Profile

Client Name - Madison Gould

Gender - Female

Age – 13

Status - Youth

Occupation - Student in Year 9

Taken before interview

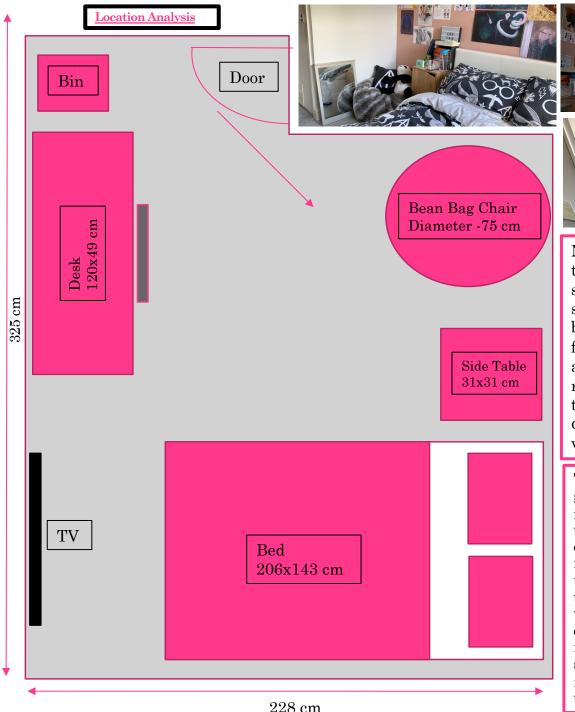


Hobbies – Gaming, reading, movies & sitcoms, cycling, socialising

Requirements – Madison is currently a student so she mainly has a large amount of homework that she completes at home which she currently hasn't got much space to do so. In her own time she likes to relax by playing online games with her friends and also watching several different shows on her phone or laptop. She also occasionally likes to break away from technology by reading or perhaps going out on leisurely bike rides. She only has a small bedroom space meaning that my product will have to be easily stored or quite compact so that it wont be cluttering her space.

Target Market

So far, my research has shown that multifunctional furniture can be suited for any body, depending on the functions carried out. This could range from elderly people to children, this is because it makes parts of their lifestyle more easy and accessible. This could be pieces of furniture that have storage, create more surface space, can be extended or collapsible. The age range I will target my furniture towards will be teenagers, people ranging from 12-18 years of age. However this can also be used by any body else who may require these functions.













Now that I have chosen a client to design a piece of furniture before, I needed to look around the location in which they live in and where it will be used. The space chosen is my clients bedroom, this is because it is the space where they spend the most time. The main feature of the room is the bed as it is the biggest piece of furniture and takes up most of the room. Other smaller features in the room are the bean bag chair that is tucked in one of the corners and the bedside table that is beside that. However when first looking into the room, the desk and TV are the first parts of the room that you see. On top of the desk there is a small standing mirror and other small ornaments displayed. There is also a shelf up above the desk displaying figurines and various books, adding different heights to the room.

The room has been painted two different colours – light grey and dusky pink. On the wall where the headboard is resting there are many posters covering up most of the pink colour which makes the opposite wall stand out more. The floor is a darker grey colour which has a nice contrast to the lighter colour on the wall. However the desk and bed are coloured white and the bedside table is a light brown oak wood. This means that whatever I may design will have to follow one of these colour schemes. Because of the big window, a lot of natural light comes into the room, making it seem more spacious and open. All of this creates a comfortable cosy mood within the room because although space is very tight, the lighting and layout crates a spacious feel

Summary – On this slide I have looked & analysed the location where my piece of furniture I will design will be. I have looked at features, such as the rooms colour scheme, existing pieces of furniture and the remaining space in the room. This is so whatever I design will fit within the room and will match with the style,