

Project Development

Identification and Justification of Ideas and Resources

Description of Resources and Ideas

Wood: The wood I chose to use to build my MDP is a recycled wood from which I purchased from the school for a total price of \$30. The wood is strong but only to a degree, whilst being strong the wood is not suitable for using joints on. E.g. Dovetail joints, rebate joints etc. One sheet of the wood was all that was required to cut up all needed pieces, all other wood needed for braces, skirts etc was used from off cuts laying around the classroom.

Fabric: For a feature on my project I have decided to line a particular section of it with a blue fur like fabric. I purchased the fabric from the local Spotlight store in Merrylands. I bought the fabric for a total of \$8.50 for a sheet 150cm x 150cm. Once cut to the right length I then lined the section for my stereo with it. A problem arose when unsightly corners became noticeable so I made corner brackets which hid the messiness and left a neat finish

Mesh: I have chosen to cover holes on the project where my speakers must go with a black mesh that I purchased for a total of \$4.00 from a local Hardware House store. The mesh is quite dense making it harder to see through it, this makes it perfect as it gives the desired effect.

Paint: The paint purchased was a light blue. This color was chosen to create contrast with the blue fabric I had chosen to line the special stereo section. The paint cost me a total of \$36 also purchased from the Hardware House

Jig -saw: For many cuts I used the Jig-Saw. Its maneuverability is ideal for many angled cuts and hard to reach cuts that need to be made. It proved quite an asset, allowing me to cut such things as my speaker holes, Main top piece etc.

Potable hand sander: Hand held sander used to sand quickly and easily, large or small areas. I used the sander on many occasions and it helped extremely especially on the skirting and main top section.

Drop Saw: I personally did not use the saw but the teacher did to help me with the completion of my project. It was used to cut the skirting for the edges of my project.

Circular Saw: The circular saw is a large saw situated in the middle of the room used to cut up large pieces of wood easily and quickly. It is bolted to the floor and only teacher may operate the machine, anyone else is restricted to using the machine.

Disc sander: The disc sander is a stationary machine that may be used by all students, but only with the permission of their teacher and proper safety gear. I used the machine to sand down numerous pieces to the correct sizes accurately and easily.

Tenon Saw: The Tenon Saw is a hand held saw used to cut reasonably sized pieces of wood. The saw is approximately 300mm – 400mm long and has a wooden handle where it must be held. I used the saw a little bit but not much. It was only appropriate for certain sections of the job like all tools.

Plain: The plain is a long wood-shaping object, which is used to remove tin layers of excess wood until required size is made. I used this tool but not extensively.

Potable Drill: The portable drill is much like a drill press but is hand held. I used it on many occasions to drill holes which I then placed the jig-saw through to cut certain sections out. I also used it to pre drill holes for screws and counter sink holes on my job.

File: Used to straighten and smoothen out rough edges.

Hammer: Used to hammer in nails, panel pins etc.

Metal Rule: Metal ruler used to measure up lengths and sizes.

Selected / Possible Alternative Resources and Ideas

Wood: For the putting together of my MDP an alternative, stronger and better looking type of wood could have been used, but I found that it would break my budget and is not as environmentally friendly as my wood. I am pleased with the wood I am currently already using.

Paint: An alternative color or colors could have been used to paint my job but I found that I took a liking to the particular colors I chose. If and alternative wood was chosen and grain was visible I could also have varnished the wood as an alternative.

Mesh: The mesh I chose was black but an alternative color could have been chosen, and I could have purchased and used a far less thick form of mesh, but I found this one to be the best one, giving me a satisfied final effect.

Fabric: The fabric I used was a blue, furry fabric. An alternate color and texture could have been used but I like the effect of the color I bought. Alternate materials could have been used to fill in the box consist of polymer: which could have been melted to the desired shape, contact: which could have been cut and stuck neatly or other colored material.

Tools: All the tools used were appropriate and I can't think of any alternate tools that could have been used to do the job.

Project Realisation

Evidence & Application of Practical Skills

Skills Utilized During the Development of my MDP

- Usage of jig-Saw to cut angled and hard to reach cuts
- Usage of portable Hand Sander to leave smooth finish
- Usage of plain to shave of thin layers of wood
- Usage of Drop Saw for cutting angled pieces
- Usage of circular saw to cut large pieces of wood
- Use of Disc sander to sand down pieces of wood to desired size
- Usage of Tenon saw to cut small pieces of wood of reasonable size and length
- Portable Drill used to pre drill holes for screws and drill holes to insert jig saw into
- Usage of file to file down rough edges in hard to reach places, on the interior of wood
- Usage of hammer to hammer in panel pins, nails etc into job to hold together job
- Usage of Metal Rule to measure up measurements and lengths needed.

All the above skills were utilized in the development and construction of my MDP at one stage or another. Analysis of my MDP will show the use of all the above if looked at closely.

Project Realisation

Consideration of the Practices in Industrial/Commercial settings as they relate to the MDP

During the development of my MDP many industrial settings have been adopted throughout the whole process. The settings adopted consist of all of the following:

- The acknowledgement and practice of all occupational health and safety regulations including the use of protective eyewear, apron, hairnet, fully enclosed leather shoes, removal of all dangerous jewelry etc.
- The use of desktop publishing software to create and complete my portfolio work. The program used to develop the project was Microsoft word '98'. Although not a very recent version I am still pleased with the finished result.
- The use of numerous industrial forms of machinery to complete all aspects of my MDP successfully. Such as the use of the disc sander, drill press, drop saw, circular saw etc.

Evaluation

Analysis and Evaluation of functional & Aesthetic Aspects of the Design

Function: Once finally complete the final product of my MDP was almost a complete success as it attended to almost all it was asked to in the 'criteria to evaluate success'. The projects aesthetics were pleasing once finished, it was steady, safe and strong and shows potential durability. The unit also holds my stereo and other items neatly and tidily making it fully functional in that aspect. Being that the unit attends most my needs I find it to be reasonably successful project. The job was unsuccessful in the aspect that I did not finish certain areas. More effort could have been made to fully finish the job, finishing the Playstation storage space and opening door at the bottom of the unit. Time usage could have been planned much better, I believe my failures or floors are due to my time planning.

One last aspect I am disappointed with is the fact that I could not really show of joinery skills on my job due to the wood type but I believe I made a reasonable effort to make the job best I could. All in all I am fairly pleased with my final result.

Aesthetics: Aesthetically my MDP I believe is also a success as I find it quite pleasurable to look at and I am happy with the final result. The colors contrast well, the fabric used is eye catching and stylish and when I have asked for peoples opinions on the final product all responses are positive and pleasing. Also many whom have looked at my project without pressure have complimented and admired the job, giving me reason to believe that the job is successful in the aesthetic aspect of things.

On the negative side of things the job is untidy in some places, such as the fabric, which did not finish up 100% the way I wanted. Also the painting of my project was rushed due to the time factor. I ran out of time before a proper job could be done.

Evaluation

Final Evaluation of the Project with Respect to the Project Proposal & the Project's Impact on Society & the Environment

Once finished I found my project only semi successful, only some of the criteria were met. Although majority of criteria were met, not all was completed. Whilst the unit holds my stereo, speakers and television it does not hold my Playstaion, this making it unsuccessful. It is aesthetically successful also and I am pleased with the way it looks completely except for the missing Playstation storage space.

My project will not have much of a global effect on the earth unless a big company spots my work and decides to develop millions of them daily which I think is a highly unlikely possibility. In my house however there will be a large impact, I may very well have for the first time in a long time a clean room, which is what my main objective is in the designing and assembly of this project. If so I will be extremely pleased with the result among many others mum, dad, brother etc.

My theory is that my product will make an impact on a small part of society making my mum, dad, brother, visitors and myself happier every time we look into or around my room. Being that my family will be happier this will make my house a friendlier environment to live in, keeping my parents calmer and less angry making it also a much safer environment and allowing me to rhome freely around the house without fearing for my life. Because I wont be getting yelled at my self esteem will rise immensely and I will find myself feeling less stressed along with my parents. This stress relief may result in my family and I seemingly becoming what some would call 'prettier'. So in theory all this could only be a good thing, 'in theory'! The construction of my project however adds to pollution, due to the fact that I used a lot of power tools and energy much of which produced excess dust etc, also paints I used could very well effect the environment, but these effects will be minimal. The unit will make my house a cleaner environment to live in also.

HSC 2002 – Design and Technology

Major Design Project

Band 2/3

Sample 2



PRODUCT



DETAIL 1



DETAIL 2

- functional and aesthetic criteria have been identified, and evaluated anecdotally.
- tools used have been listed and their application identified.
No evidence of experimentation. [CLICK TO VIEW \(P4\)](#)
- evidence of decision-making and application of conclusions in use of materials.
- design ideas communicated using descriptions in folio.
- evidence of some knowledge of practices used in industrial/commercial settings.