

Demonstrates a wide range of computer applications appropriate to the development of the major project.



Industrial Technology

Folio

MPR

Trials & Tribulations

The 'MPR' is made from Blackwood, which is natural hardwood of the south coast. I purchased it through a friend who owned a retired wood mill. Full of past timber from around the area cut into purchasable slabs. There was a problem however with my mass of purchase which resulted in repeated trips back to the old mill to purchase further timber, which cut into my time plan significantly.

There was a possibility to use other woods - (Pacific Maple, Red/Blue gum, Cyprus Pine, Aussie Blackwood, Cedar & Apple box) but not all had the structural properties I desired. I decided Blackwood would give a better final appearance and I will ensure the entire product will be smooth & attractive & show off the Blackwood grain.



- ✓ This above picture is of my back legs and second purchase of wood. The wood extends far out of the picture - wastage was increased because this particular piece of wood had patches of bores and insect damage throughout the centre.



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Research

The following research was conducted:

- Blackwood is the cheapest hard wood that would fit into my requirements and parameters. Other wood types were either too hard or too expensive.

E.g

Red wood	Blue gum
Jarrah	Cyprus pine
Teak	Mountain Ash

- Pictures & rocking chair information were found at these internet sites;

www.designboom.com/rocking/ure.html

www.carolinarockingchair.com/windsor.htm

www.apatiooutlet.com



These are

poor quality modernistic designs, with minimal quality. Not appropriate for my intended ideas.



These individual rockers are of higher standard quality than above & some have interesting design features but I would like a more intrinsic design.



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Selection & justification for materials, components, processes & other resources

MATERIALS:

OPTIONS	CHOICE	JUSTIFICATION FROM RESEARCH
<p>Whole chair is made from same wood</p> <ul style="list-style-type: none"> -Aussie Blackwood -Blue gum -Cedar -Apple box -Cyprus Pine -Red gum 	<p>Aussie Blackwood</p>	<ul style="list-style-type: none"> -Most economical -Easy to obtain -Beautiful grain pattern -Good aesthetics -Hardwood therefore heavy, strong -Easy to work with Apart from routing
<p>Screws</p> <ul style="list-style-type: none"> -Wood screws 60mm, 75mm -Tek screws 	<p>Wood screw 75mm</p>	<ul style="list-style-type: none"> -Fits in plug holes -Good thread & thickness -Phillips head
<p>Glues</p> <ul style="list-style-type: none"> -SEMPAROC polyurethane adhesive -A V Syntec Isocyanate/PVA -2-pack crosslink PVA -Modified urea formaldehyde 	<p>SEMPAROC polyurethane adhesive</p> <p>A V Syntec Isocyanate/PVA</p>	<ul style="list-style-type: none"> -Good lamination glue used laminating some of the rockers. -High strength -Temperature/Water resistance -Super bond strength -High Water/Heat resistance -Used on all joints, main glue used in project



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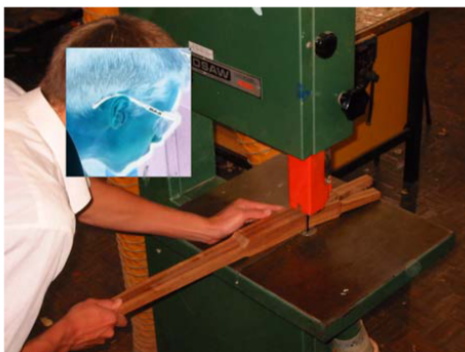
MPR



Evidence of industrial processes in the classroom

LATHE

The lathe has a high-speed rotation, which allows you to circularly shape timber. I used the lathe to round over the front legs. As you can see the tool is held firm and resting on the tool rest for total control, the dust extractors are on to remove dust particles from the air.



BANDSAW

I used the bandsaw to cut most of my components out. Sam Maloof uses the bandsaw to shape various pieces himself. The bandsaw proved very useful in accurately cutting along drawn lines, making shaping the spindles in this picture relatively easily.