



design strategies

(or 'how to teach design')

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session objectives

- to provide various examples of design strategies to be used with students
- to provide opportunities to explore these strategies
- to complete one strategy to a greater level of understanding







'our children don't like designing they only like making!'







why design strategies?

OK, on the sheet of A3 paper, sketch 5 different ideas for your

Ok, with that wood, go and make 5 different joints for a

- OFSTED have said year on year that D&T teachers are good at teaching 'how to make' but poor at teaching 'how to design'
- not only do we teach it badly we use it as a punishment!!





strategy one -scribble

 Simply take your pencil and scribble onto your paper. Look for shapes that might be a starting point for a new design





strategy two

- Sort students into threes
- Hand out word cards
- Alternative names -e.g bike = human-powered vehicle
- Mix cards up and hand out to students
- Discuss potential ideas for the product
- Quick sketch plus annotations if necessary





strategy two

- jewellery
- cutlery
- bus shelter
- push chair
- sledge
- digital camera



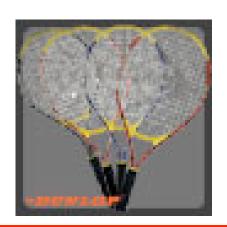


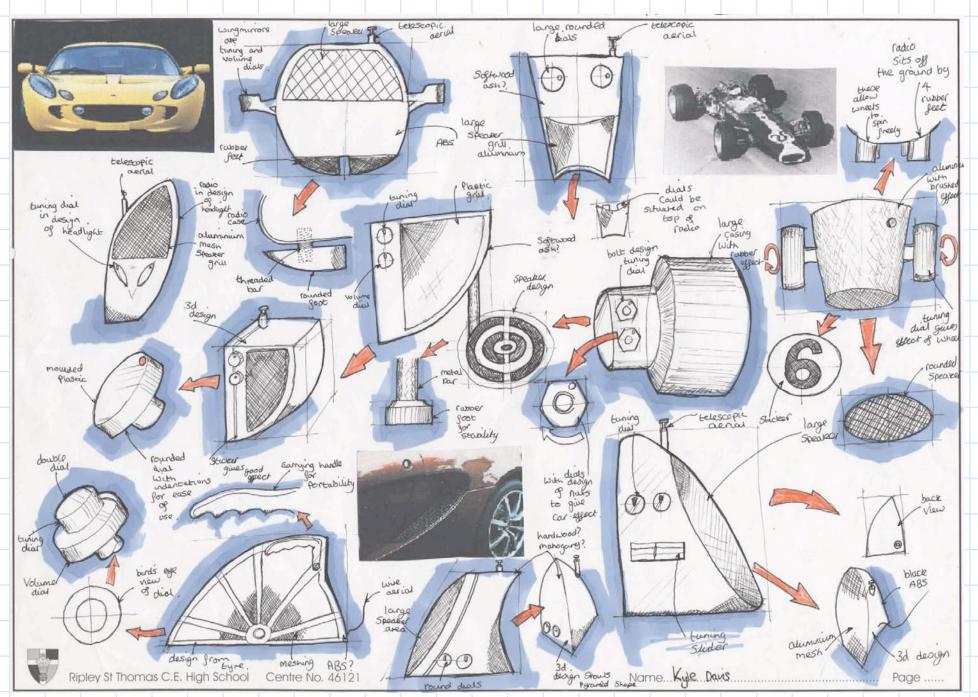


strategy three - mood board inspiration

look at the images you have on your mood board as a starting point for more ideas. e.g. it may be sports related so you could use sports equipment as your inspiration







Yr 11 Resistant Materials





strategy four - morphological analysis

- list criteria for a given design brief then generate as many 'solutions' to each criteria
- this leaves you with a matrix of potentially hundreds of ideas





strategy five - building blocks

resources - variety of children's construction bricks

- in pairs sit back to back
- one person to make a simple shape using the construction bricks
- describe the shape to your partner who then sketches what they think it is





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strategy six - inspiration from nature















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strategy seven - inspiration from the built environment









strategy eight - less is best

'Reduce' the product in some way but keep the integrity of the design

- Materials used
- Components used
- Energy in production
- Applied decoration

Either through discussion or sketching







designing through modelling

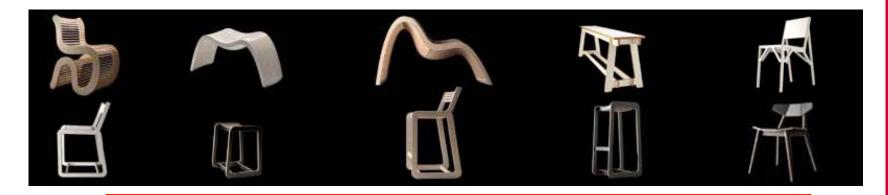


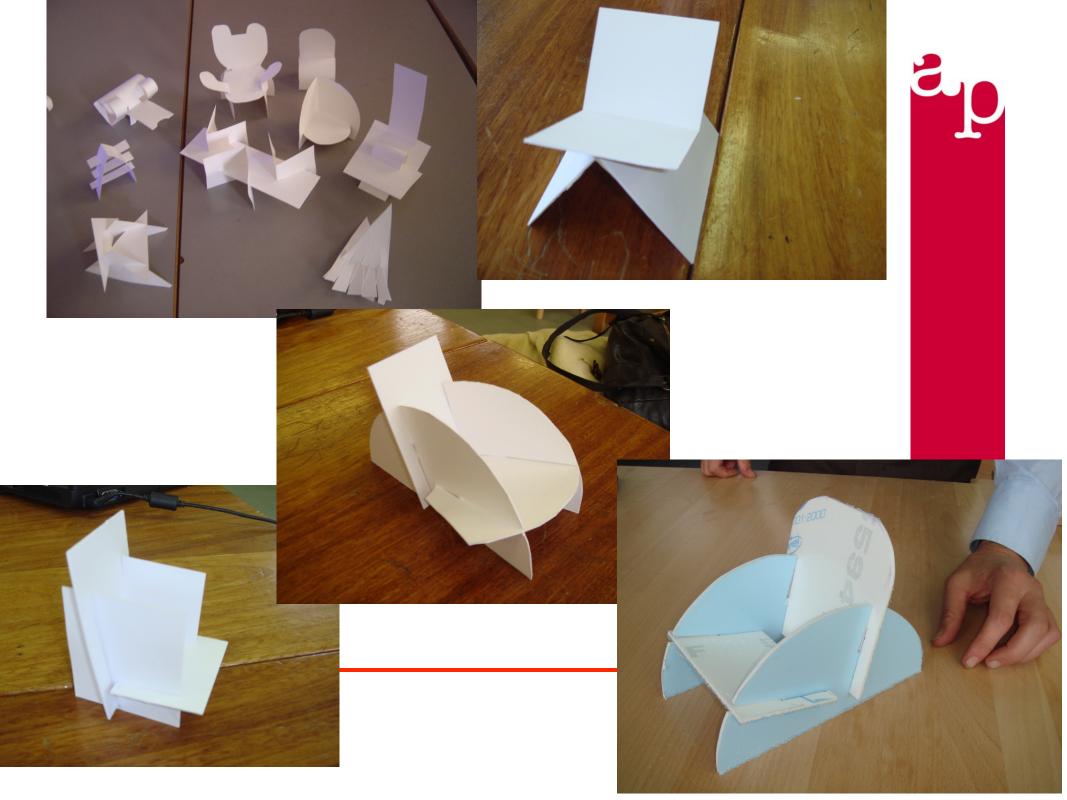


strategy nine - modelling exercise (activity I)

Design a chair which is constructed by slotting material together

- Hand out a sheet of A4 card
- Use nothing but slots to put the card together to form the chair

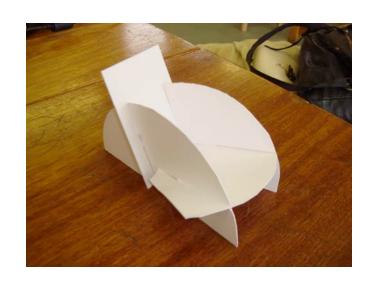


















modelling exercise (activity 2)

- identify a model that you think has potential to be developed
- using that model as your starting point, develop it further





context

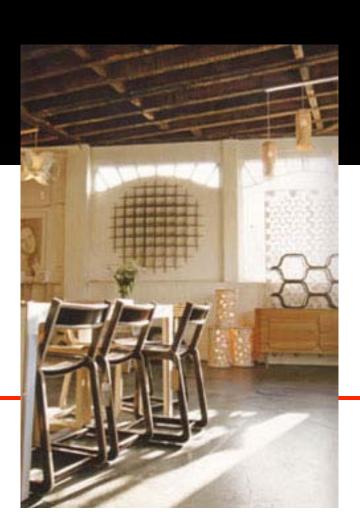
'unto this last' is a contemporary furniture company based in London UK, they specialise in plywood furniture and have an extensive range of products. They like working in plywood because it is very sustainable and structurally sound. They have a range of products that rely on slotting as the only construction method.

NC importance statement: combine practical and technological skills with creative thinking to design and make products that meet human needs.

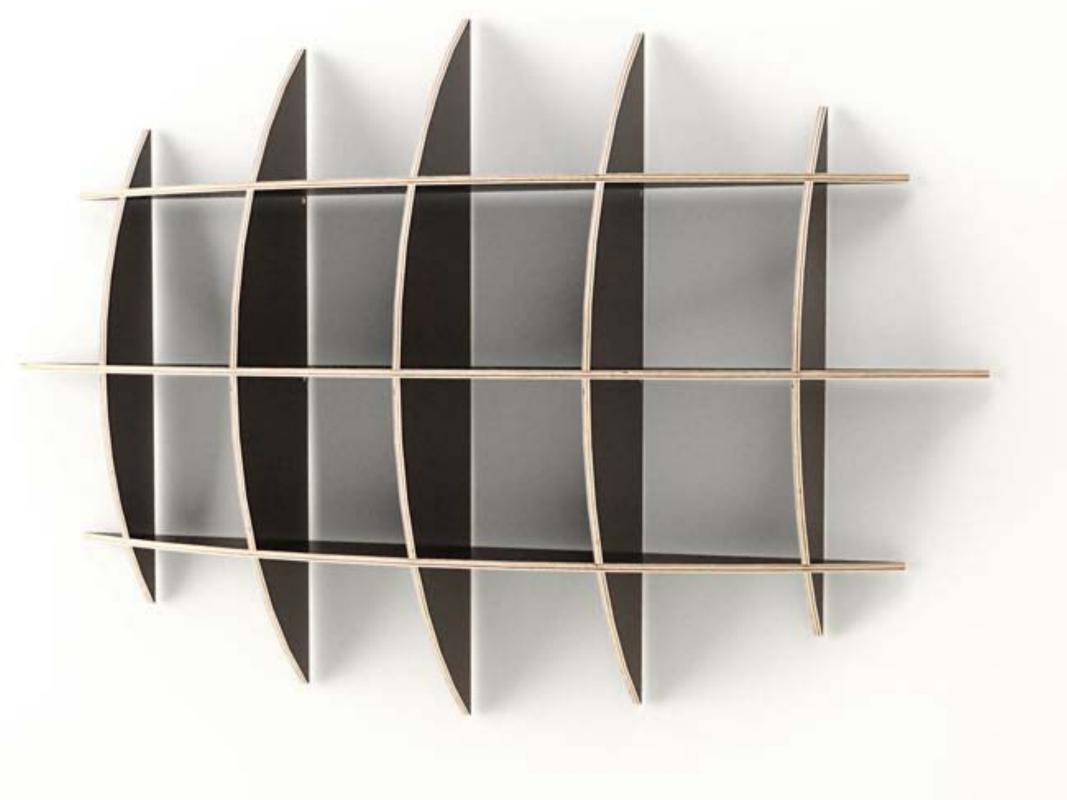
They evaluate past and present design and technology, and its uses and effects.

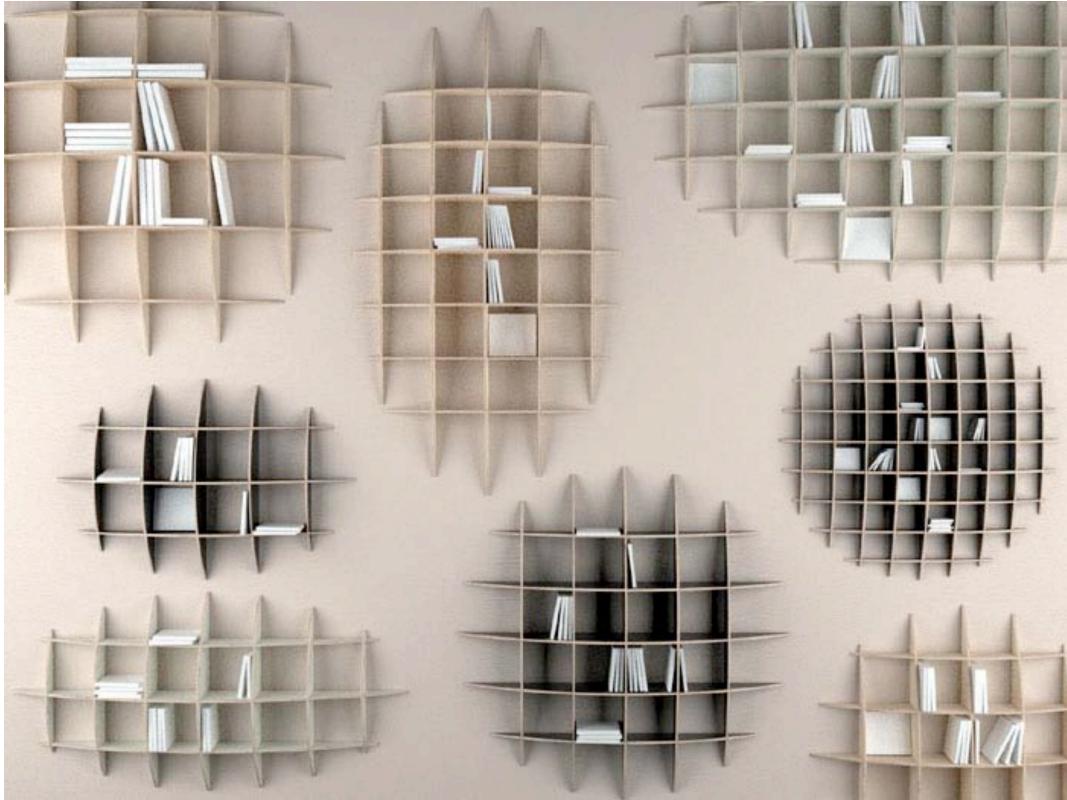
Unto This Last

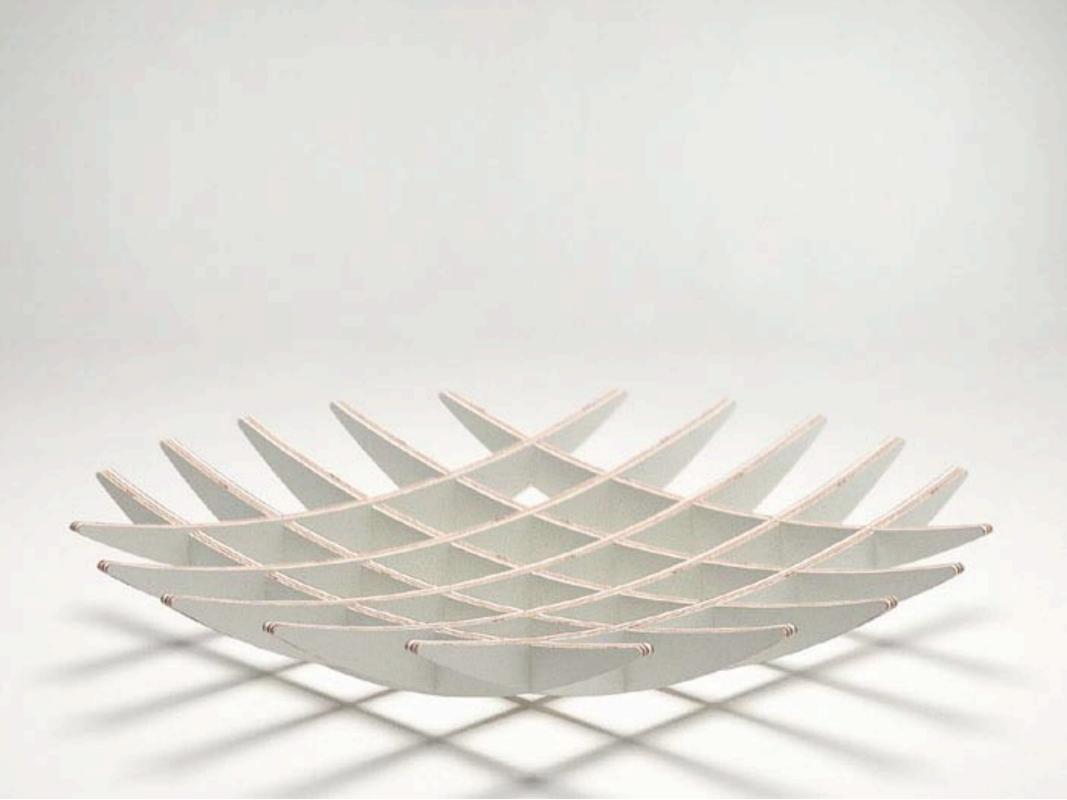
















analysis of existing range (activity 3)

- C cost (value for money / actual cost / relative cost)
- A aesthetics (looks / style / colour etc)
- F function (what is the intended purpose)
- E ergonomics (size / comfort)
- Q quality (is it appropriate quality)
- U user (who is the target audience / is it fit for them)
- E environment (where will it be used / is it environmentally sound)





target user (activity 4)

- where do they buy their groceries?
- where do they buy their clothes?
- what car do they drive?
- where do they holiday?
- do they have children?
- what's their income?
- what sort of house do they live in?







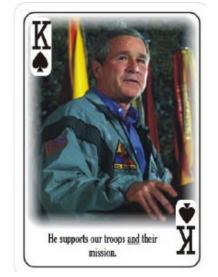








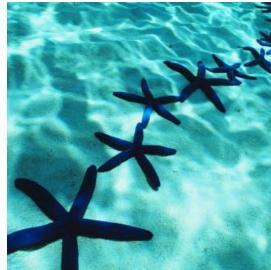




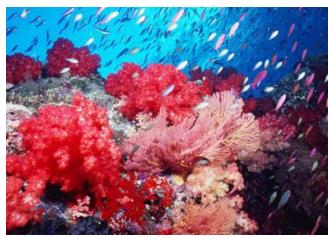




























target user (activity 4)

- where do they buy their groceries? expensive (waitrose)
- where do they buy their clothes? designer (Paul Smith)
- what car do they drive? (BMW, Merc, etc)
- where do they holiday? (Middle East, Brunei)
- do they have children? (No, or have left home)
- what's their income? (high double income)
- what sort of house do they live in? (apartment, minimalist)





design brief (activity 5)

design a prototype product that can be presented to 'unto thee last' as a potential extension to their existing range

NC Key Concept: 1.3 creativity a, making links between principals of good design, existing solutions and technological knowledge to develop innovative products and processes

NC Key Process: 2a, generate, develop, model and communicate ideas in a range of ways using a appropriate strategies

2d, use their understanding of others' designing to inform their own

working in pairs, starting with card, developing in card and prototyping in foam-board



















design brief

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