

Design Activities

Practical Home Learning
OLHS Cumbernauld

Pupils can send any completed work to their teacher via GLOW emails



THEORY SKILLS

Studying a product over time

Pick a product or brand that you like (basketball lovers pick a basketball or basketball jersey, etc.) then:

- State what it does and how people use it
- Give 5 examples detailing how it has changed over time (i.e. different materials invented, methods of measuring performance studied, etc.)
- Provide a brief on what you think might happen to the product/ brand over the next 10 years.



Design Scenarios

Picking a topical subject can help...

- New type of 'more socially acceptable' face mask
- Specialised trolley for panic shopping at supermarket
- How to get people to wash their hands regularly and for 20 seconds...

Do a little research and a presentation drawing.



Study Famous Product Designers

Research to understand the person behind the products you use everyday such as:

- Tinker Hatfield
- Ralph Gilles
- Sir Jonathan Ive
- Chris Gray (Skyline Attractions)
- Elon Musk
- Ken Kutaragi
- Phillippe Starck
- James Dyson
- Buckminster Fuller
- Dieter Rams
- Mark Newson

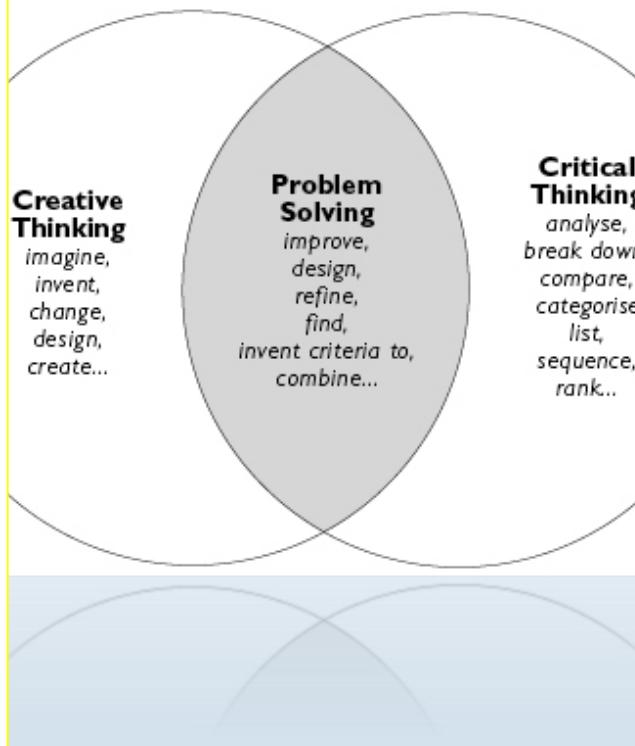
NOTE: There are some good design documentaries on Netflix about Tinker and Ralph (and probably a few others)



THINKING SKILLS

Creative Thinking

- Negative brainstorming
 - Instead of good ideas, you want to think of bad ideas (i.e. what don't you want). Then at the end invert the answers into good ideas. (This is a great technique to get ideas out if you 'can't think of anything')
- Visually Identifying Relationships
 - Showing random pictures and drawing a relationship between the image and what your project/objective is.
- Random word
 - Use a random word generator and then like above, draw a relationship between the objective/project and the word.



Critical Thinking

- Targeting
 - Put a bulls-eye target somewhere, then take each idea and think of where it would land on the target. Then ask why.
- PMI (pluses, minuses and interesting)
 - Three columns, then identify what is good, bad and interesting about your idea.
- Storyboarding
 - Take your product from the experience of the end user and create a great experience! Disneyland rides are made with this technique which is why they are so good.
<https://www.uxbooth.com/articles/how-to-use-storyboards-for-product-development/>

Click on the link on how to do it.



CREATIVE & CRITICAL THINKING SKILLS

Drawing Exercises

- Learning how to draw is important to help communicate ideas. If you are remote it's a perfect time for some drawing exercises.
- There has to be plenty on YouTube.
- Autodesk **Sketch Book** app is a good resource (free) to download to practice sketching and drawing abilities.



Sketch-up / CAD Drawing Time

- Students can install it at home if they don't already have it and away they go. Sketch up has some good videos to start with.

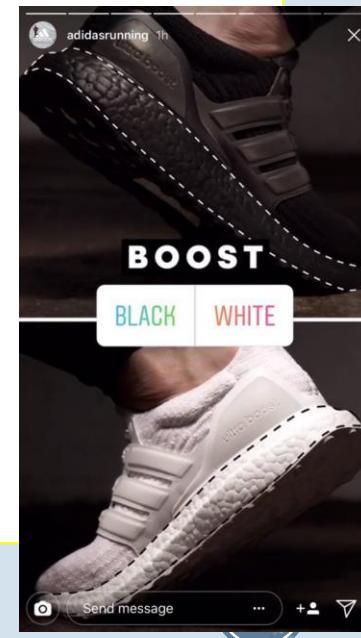


Social Media Market Research

You can do some research on peoples needs and what they want.

- You can post polls, and have people answer questions via comments on your feed. It's a great way to easily connect to others when they are working remotely.
- To do this you will need to think of the questions you want to ask, and possible answers.

See ADIDAS example



CREATIVE & CRITICAL THINKING SKILLS

Marble run / Rub Goldberg Machine

A different spin to do it from home. Students can raid their recycling bin, shed or their room for different ideas and materials to use.

- Here are some different types of simple machines you can ask for to make students do a little research and use some ingenuity:
- Lever
- Pulley
- Inclined Plane
- Wedge
- Domino Chain Reaction



You can video it when you get it working and send it to your teacher via GLOW email.

Mock-up Building

Using whatever is at home make a scale mock up instead of a 'real one'. A mock up just means a model, typically used for demonstration or instructional purposes.

- They do not need to be perfect but they do force you to answer questions about joins, sizes and aesthetics.
- You can take a picture and send it to your teacher via GLOW email.

