



***HIGHER
DESIGN & MANUFACTURE***

Idea Generation Techniques

WHAT'S THE STORY?

WHAT'S THE PROBLEM AND HOW COULD YOU SOLVE IT?

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Learning Intention & Success Criteria

Solving a Design Problem

- *I am*

- ★ *Developing my idea generation techniques.*
- ★ *Developing my sketching skills.*
- ★ *Using my skills and knowledge to solve a design problem.*

- *Social Goals*

- 👍 *Listen to the teacher at all times.*
- 👍 *Use my table voice when working.*

- *I can*

- ✓ *Apply my knowledge of idea generation techniques to solve design problem.*

- *Evidence (say/write/make/do)*

- 👍 *Fully annotated designs*

IDEA GENERATION TECHNIQUES

- Designers often use idea generation techniques to stimulate creative thinking.
- We use a number of idea generation techniques to help us think of new and exciting designs.
- Today we are focusing on
 - Thought showers (Brainstorming)
 - Inspiration boards (Mood/Lifestyle/Theme)
 - Morphological Analysis

THOUGHT SHOWER

- This is a very popular idea generation technique which can be completed as a group or on your own.
- Thought showers should include any word or phrase that pops into your head when you are thinking about the chosen theme.

GUIDELINES

The Guidelines for Thought Showers are as follows:

- The **problem** must be defined in **simple terms** to encourage solutions.
- **Quantity** has priority to begin with **not quality**.
- **Think first, evaluate later**.
- **No idea**, no matter how **outrageous**, should be **disregarded**.
- Let **free thinking develop** through word association.
- **Combine, expand** or **improve** previous ideas.
- **Evaluate** the ideas at a **later stage**.
- Select and list the ideas that have **merit or value**.



ADVANTAGES AND DISADVANTAGES

Creating and generating ideas this way has its **Advantages:**

- Helps members **think and express** themselves.
- Other peoples ideas can **encourage** a **chain reaction thinking**.
- A wealth of **alternative suggestions** can be found.
- Group members are **encouraged** to work and **cooperate as a unit**.



There can also be **Disadvantages:**

- Chain reaction thinking can encourage **different lines** of thinking being **channeled** into a **limited number of ideas**.
- One person may suggest an idea that the others **latch on to**.
- A **wider range** of ideas **may not be explored** because of this.
- This **does not** mean that Thought Showering is a **bad thing**, although safeguards should be taken to **avoid channeling** ideas into a limited line of thinking. There is a technique called **Brainwriting** that begins to take such precautions.

BOARDS

- An inspiration board brings together a number of images related to the theme.
- There are a few types of inspiration boards we need to know about
 - Mood board
 - Lifestyle board
 - Theme board
- These boards are all very similar as they use a wide range of images to represent something to give them inspiration for shape, colour, materials etc.

MOOD BOARDS

- A range of visual images are used to create an atmosphere which reflects a chosen mood.
- The mood of a product is the feeling or emotion aroused in us when we see the it.
- A mood board can be personal and unique to the creator as images can trigger different emotions in different people.
- Mood boards can be created by the designer, the client or the consumer.
- Particular moods will appeal to different people
Colours can also be displayed in mood boards
- Moods to consider:
 - Stressed. Cool. Sad. Happy



LIFESTYLE BOARD

- Full visual images giving a snapshot of a particular target group.
- Firstly find your target market, find out as much about them as you can. Secondly research where they go? What they wear? What they eat? and so on to create the board.
- Once this has been done collect visual images of the group looking at: Music, food, houses, cars, hobbies, styles and so on. Fabrics etc can also be used
- Once your product is completed a picture of it can then be placed on each of these boards to see whether it looks out of place

- A chosen theme is researched in the same way as a mood and lifestyle board.
- A theme is researched and pictures are found to support this.
- For example:
 - **Casino – Playing cards, dice, money and so on.**
 - **Garden – grass, trees, tools, flowers and so on.**

MORPHOLOGICAL ANALYSIS

- Morphological Analysis is a very structured way of generating ideas.
- It is an extremely useful technique if you are working on your own.

MORPHOLOGICAL ANALYSIS

Target Market	Function	Material	Theme
5-10 years old	5 Pencils , Rubber, Sharpener	Wood	Nature
11-15 years old	5 Pencils, 5 Pens	Metal	Space
16-21 years old	6 Pens, Post it notes, bottle of tipex	Plastic	Common Wealth Games
22-30 years old	2 pens, 2 pencils, rubber, sharpener	Recycled Household items	Food

MORPHOLOGICAL ANALYSIS

Target Market
5-10 years old
11-15 years old
16-21 years old
22-30 years old

Function
5 Pencils , Rubber, Sharpener
5 Pencils, 5 Pens
4 Pens, Post it notes, bottle of tipex
2 pens, 2 pencils, rubber, sharpener

Material
Wood
Metal
Plastic
Recycled Household items

Theme
Nature
Space
Common Wealth Games
Food

Using Morphological Analysis, design at least 1 idea for a desk tidy or desk organiser.

- Your design must follow your given topics from the Morphological Analysis. You can also use the thought showers and inspiration boards to support your design(s).
- Things you might want to include
 - What does it store and what goes where?
 - What colours are you using?
 - Where have you taken your inspiration from?
 - What material(s) are you using?
 - How would you manufacture this design?

Answer the following questions on your post it.

1. Write one thing that is good about your design.
2. How would you change your design?
3. How would you justify your inspiration?