# Principles of Furniture & Joinery Design

# CREATIVITY & & LATERAL THINKING

#### Creativity

- $\binom{2}{2}$
- What is "Creativity"
- Creativity is being able to generate or recognize ideas, alternatives, or possibilities that may be useful in problem solving.
- "At the simplest level "creative" means bringing into being something that was not there before. In a sense, "creating a mess" is an example of creativity. The mess was not here before and has been brought into being" (De Bono. (1996) pg3)

## Characteristics of the creative personality



- Creative people are thought to be smart, intelligent & artistic
- Creative people alternate between imagination and fantasy at one end, and rooted sense of reality at the other.
- Creative people seem to harbour opposite tendencies on the continuum between extroversion and introversion.
- Creative individuals are also remarkable humble and proud at the same time.
- Generally, creative people are thought to be rebellious and independent.
- Most creative persons are very passionate about their work, yet they can be extremely objective about it as well.
- Nonsense, Rubbish!!!!

#### Everyone can be creative thinkers.



- "Creative Thinking" is not inherited or in the genes, it is a skill that can be learnt.
- Creative Thinking adds to peoples natural abilities and increases their strengths, which improves creativity and innovation.
- Traditional thinking uses the processes of logic, sequence or historical way.
- Lateral thinking interrupts the normal thinking sequence and arrives at the answer from another angle.
- Train track thinking versus spaghetti junctions

### Edward de Bono - Father of Creative Thinking

• Edward de Bono born 19 May 1933.

He is Maltese physician author, inventor and consultant. He is regarded by many to be the leading authority in the world in



- the field of creative thinking and the direct teaching of thinking as a skill
- He has written 62 books translated into 37 languages and has been invited to lecture in 54 countries.
- Originator of lateral thinking which treats creativity as the behaviour of information in a self-organising information system such as the neural networks in the brain.
- Edward De Bono on Creative thinking
- http://voutu.be/UjSjZOjNIJg
  Jennifer Byrne 2013

#### Problem solving

$$\binom{6}{6}$$

- Add 1 + 2+ 3+ - 8+ 9+ 10 =
- Answer 55
- Add 1 + 2+ 3+ - 98 + 99 + 100
- Answer ?
- Rearrange numbers underneath original numbers
- 1 + 2 + 3 + - 98 + 99 + 100
- 100 + 99 + 98 ---3 + 2 + 1
- Answer is 101 each time divide by 2
   Answer 5050
- By re-arranging the numbers this way the task becomes a lot easier this is being creative

#### Design an expandable table



- Research work out an idea
- Borrow !– (steal) modify an existing idea
- Wait for inspiration!
- Get someone else to design table
- Other? . . .
- Apply a deliberate technique of "Lateral Thinking"

#### Design an expandable table



- Random words
- Chair
- Colourful, circular, character based.
- Height, happy, hippy.
- Aluminium, automatic, alien.
- Irregular shape, Iridescent, Irish
- Red, revolving, Rocco style.
- Expand on each of the words to see what comes into your mind
- Revolving, shiny aluminium, irregular shape, like an alien head.







- The six hats and the thinking processes that they represent.
- White hat Facts & Information
- White sheet of paper write down facts, numbers & information.
- Focus directly on the information at hand what is missing and what is needed.
- Red hat Feelings & Emotions.
- Red hot fire, feelings, emotions & intuition.
- Gut feelings and hunches that you don't have to back up at this stage.



- Black hat Logical negative
- Black robes of a judge.
- Asks the questions about whether idea is legal, ethical or profitable.
- Caution hat tries to prevents mistakes.
- Yellow hat Logical positive
- Sunshine
- Optimism and positive viewpoints.
- Tries to show how something can be obtained.



- Green hat Creative thinking & Possibilities
- Growth and vegetation.
- Creative thinking and new ideas.
- Puts forward different possibilities and alternatives.
- Blue hat Control of process & Steps.
- Sky and overview.
- This hat is used to gain some control over the whole process.
- Blue hat sets agendas, monitors ideas and make suggestions towards progress.



- Main benefits of Six Thinking Hats method:
  - 1. Allow to say things without risk
  - 2. Create awareness that there are multiple perspectives on the issue at hand
  - 3. Convenient mechanism for 'switching gears'
  - 4. Rules for the game of thinking
  - 5. Focus thinking
  - 6. Lead to more creative thinking
  - 7. Improves communication
  - 8. Improves decision making
- 29 ways to stay creative
- http://youtu.be/\_1E4aeCTg7s

#### References



- De Bono, E.(1996) Serious Creativity. Using the Power of Lateral Thinking to Create New Ideas. London. Harper Collins.
- Edward De Bono on Creative Thinking
- <a href="http://edwdebono.com/cavendish/cavendish/pdeblat.htm">http://edwdebono.com/cavendish/cavendish/pdeblat.htm</a>
- 29 ways to stay creative
- http://www.youtube.com/watch?v=\_1E4ae
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