

# Thinking Differently

## Creativity Toolkit



**A treasure chest of ideas and  
techniques to stimulate  
your thinking**

## **PROGRAMME OVERVIEW**

- ❖ To appreciate the role of creativity and innovation within the organisational settings
- ❖ To test creative techniques to generate ideas and problem solve in a safe and supportive learning environment
- ❖ To establish a toolkit of practical strategies to enable you to be more flexible and effective
- ❖ To enhance your confidence and ability to create and develop ideas and see them through to completion

### **Outline Programme**

<b>Day 1</b>	<b>Day 2</b>
<b>Scene Setting</b>	<b>Stimulating creativity</b>
<b>What and why of Thinking Differently</b>	<b>New ways of seeing things</b>
<b>Understanding your brain</b>	<b>Generating ideas</b>
<b>Mental Locks</b>	<b>Generating even more ideas</b>
<b>Making Associations</b>	<b>From ideas to innovation</b>
<b>Thinking processes</b>	<b>Putting our hats on</b>
<b>The Creative Process</b>	<b>Breaking Through</b>
<b>Mapping your thoughts</b>	<b>What's the story?</b>

# CREATIVITY WITHIN ORGANISATIONS

Creative thinking is currently used in managerial and organisational situations for strategy, product and service development, marketing, change management and problem solving. Though well established in business and industrial settings it has only recently become recognised as relevant to the public sector. With the ongoing demands of the modernisation agenda creative thinking provides a means to find new ways of meeting the challenge.

As well as bringing innovation and providing solutions, creative thinking brings numerous advantages to organisations.....including....

**Fun!**


**Enjoyment of work**

**Motivation**

**Commitment**

**Personal growth**

**Faster and better ideas**



**What's  
involved in  
developing  
creativity?**

Creative thinking is about breaking through habitual, thinking patterns that have built up over time...the normal, dominant ordinary ways people think. It's about thinking more laterally ....changing the way you look at problems.



Within an organisation it's about changing the culture ...shifting from a ' judgement based' culture to a ' design' culture.....from assessing 'what is' to producing possibilities of 'what can be'.  
An organisation in which .....

- there is openness to innovation
- risk taking is encouraged
- new ideas are welcomed
- creative processes are routine

It's about using creative tools and techniques to stimulate the imagination and use the whole of the brain to generate and implement new ideas

# Thinking Differently

## What is all about?

If you think that the opposite of flexible is fixed and unbending, you'll recognise that being flexible in your thinking and behaviour means being able to *think differently* and *adapt*. This quality is of fundamental importance in a climate of constant change and new demands. As we meet these challenges it becomes increasingly necessary to find new ways of doing things. We live in an age where nothing stands still, we constantly move forward. The person who is able to think differently not only adapts quickly to change but is often ahead of the game....seizing opportunities to find new ways of working.

Thinking differently may come naturally to some people, but for some it can be difficult to break out of old ways of thinking and doing things. The good news is though that new ways of thinking can be learned!

Being able to think differently is about :

- ✚ Understanding the concepts of creativity and innovation and how they go hand in hand
- ✚ Recognising your own thinking habits and those of others
- ✚ Building on your natural abilities and strengths and tapping the talents of others
- ✚ Developing practical skills and techniques to use on yourself or with others to stimulate parts of the brain that have been accumulating dust!

Enabling individuals, groups and organisations to be more flexible is about developing understanding of the creative process and the practical skills and techniques not only to be more creative and innovative, but to be more receptive to both our own and other people's creativity and innovation.

**Creativity + Innovation = New ways of working**

Creativity and Innovation are rather like a horse and carriage ...without both little will change. The distinction between them is the notion of **action**. Creativity generates the ideas, innovation ensures they're turned into reality. There is a need to be more aware of the logical and practical aspects of creativity and innovation in order to learn to work **with** our brain and to harness the natural abilities and strengths that we all have.

## CREATIVITY AND YOU

Are there times when you have been creative in the past, when was it and what was happening? When are you at your most creative?

What is it about children that makes them more creative than adults?



When do you get your best ideas?



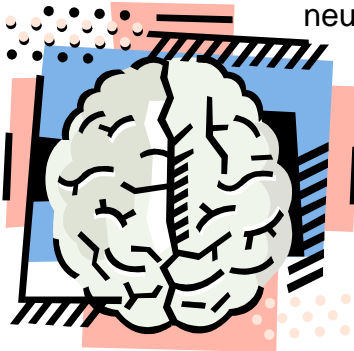
At work or at home?  
Going off to think about it?  
Getting together with other people?  
Taking a break?  
After you've 'switched off'

Models of the creative process propose that sometimes a period of 'incubation' is needed, so that your unconscious mind can work on the information.

## OUR AMAZING BRAIN

The brain weighs 3.5lbs and is the most powerful portable chemical computer in existence.

It has approximately 10 billion cells called neurons.



A typical neuron can make over ten thousand connections with other cells and the total number of points where two cells meet (synapses) is of the order of 10,000,000,000,000 (ten trillion).

However.....we don't necessarily make use of all this potential by using only parts of our brain to respond to the stimuli around us.

## Triune Brain Theory

Dr Paul MacLean (1990) head of the Laboratory for Brain Evolution and Behaviour at the National Institute for Mental Health, proposes that the human brain is, in reality, three brains, each superimposed over the earlier in a pattern of brains within brains.

### ***Reptilian Brain***

This is the oldest and most primitive part of the brain. It operates the 'fight or flight' impulses and is 'hard wired from the start. When it goes into auto-pilot it can result in more 'brawn than brain'.

### ***Mammalian/Limbic Brain***

This part of the brain is known as the mammalian or limbic brain. It is the seat of emotion and registers rewards and emotions and controls the body's autonomic nervous system. This is the site of memory and where we develop the 'wiring' that leads to automatic responses through conditioning.



### **Cortex**

80% of the human brain is made up of the cortex and is the site of rational decision making can occur, which gives us the ability to make a choice about how we respond to a stimulus. Rational thinking can override conditioned responses.

## OUR BRAIN – THE PATTERN REPLICATOR



The cells of the brain connect with one another like the lines in a huge telephone exchange. As the message passes from cell to cell a pathway or 'memory trace' is created. The more the message or thought is repeated the stronger the memory trace. It's like travelling a path through a forest the more times travelled the less resistance there will be and the more likely that path will be taken rather than a new one.

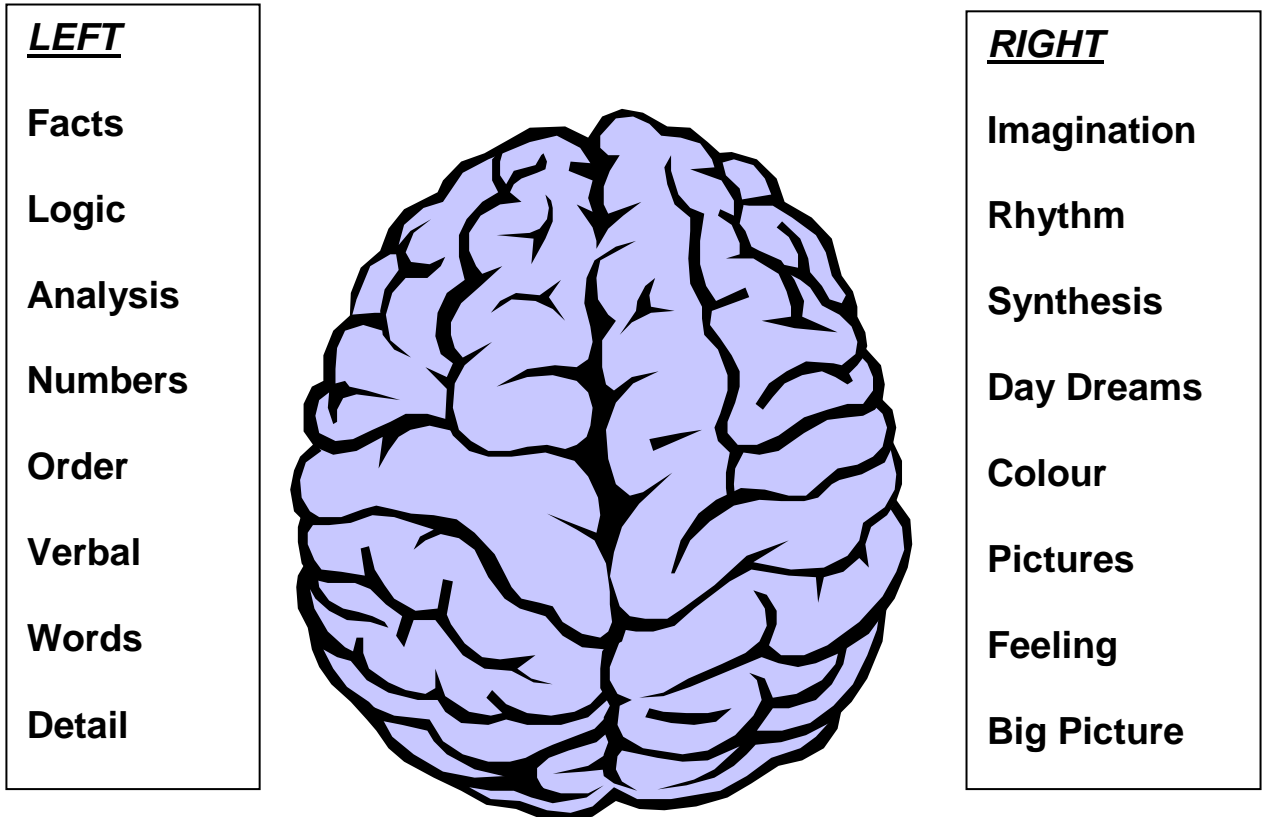
This means our brains are great pattern following systems. This characteristic is crucial for our survival but it can also work against us. It means that we follow patterns built up through experience and find it unnatural to get off the beaten track. Unless specific techniques are used, we tend to 're-invent the wheel' time after time again.

If you always do what you have always done, you will always get what you have

New information that we receive, is viewed through the old patterns and is rejected if it doesn't fit with our established patterns of thought. Change is often resisted because of the discomfort of having to think and act differently, it takes time to adjust and let go of the old ways of doing things.

## LEFT AND RIGHT BRAIN

The brain is divided into left and right hemispheres which have been shown to be responsible for different modes of thinking. Creativity is more closely associated with right brain thinking.



***Q. Which of the above lists does Society, on the whole, value most?***

***Q. What is the impact of that?***

- on society as a whole?
- on you as an individual?
- on the organisation?

***Q. Which of the above lists best represents your thinking style?***

# THINKING PREFERENCES

**The Whole Brain Model** (originally known as the Herrmann Whole Brain Dominance Instrument) was initially developed in the late 1970's by Ned Herrmann, an expert in learning, creative thinking and organisational development.

The model is the result of extensive scientific research into the physiology and architecture of the human brain, combining understanding of the duality of the cerebral hemispheres with the Triune Theory.

It proposes that individuals have different 'thinking preferences' that result from parts of their brain being 'dominant' over others. The differences are reflected in how individuals think, learn, interpret and communicate.

The whole brain model is made up of four areas representing different parts (quadrants) of the brain, A,B,C, and D which can be broadly summarised as:

<b>A Left Cerebral:</b>	logical/factual (likes to know <b>WHAT?</b> )
<b>B Left Limbic:</b>	controlled/sequential (likes to know <b>HOW?</b> )
<b>C Right Cerebral:</b>	emotional/interpersonal (likes to know <b>WHO?</b> )
<b>D Right Limbic:</b>	holistic/intuitive (likes to know <b>WHY?</b> )

The applications of the Model are almost infinite. It can be used as:

- **A tool** (eg: to gain self-awareness and team awareness)
- **A metaphor** (eg: to stimulate creative thinking)
- **A process** (eg: in planning or problem-solving situations)

The model is **not** an indicator of either skill, competence or personality. It is concerned with how people prefer to:

- Think
- Learn
- Process information
- Make meaning
- Communicate

Which in turn influences what they:

- Notice or concentrate on
- Value
- Feel comfortable with
- Have a 'natural feel' for
- Prefer to avoid.

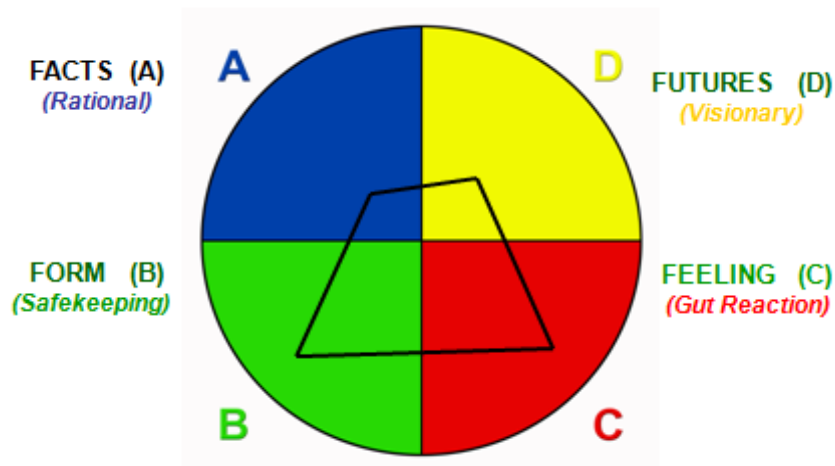


## WHAT'S YOUR PREFERENCE?

Consider which adjectives most describe you. It's likely that there'll be some in each of the boxes but perhaps more in some than others. This will give you an idea of how you tend to think.

<b>Left Cerebral</b>	<b>Right Cerebral</b>
logical rigorous thinker ( want detail) analyst mathematical technical or quantitative technical problem solver test out ideas rational	conceptualiser original creative metaphorical thinker big picture thinking simultaneous(multi task) come up with ideas imaginative spontaneous
<b>Left Limbic</b>	<b>Right Limbic</b>
like things planned dominant (like to take charge) well organised planner controlled detailed conservative (don't like change) sequential reliable practical	emotional people oriented feeling empathetic musical interpersonal communicator warm, friendly spiritual picks up on emotional climate

**This is an example of a profile of someone who has a preference for 'Form' and 'Feeling' What sort of job do you think they'd like to be in?**

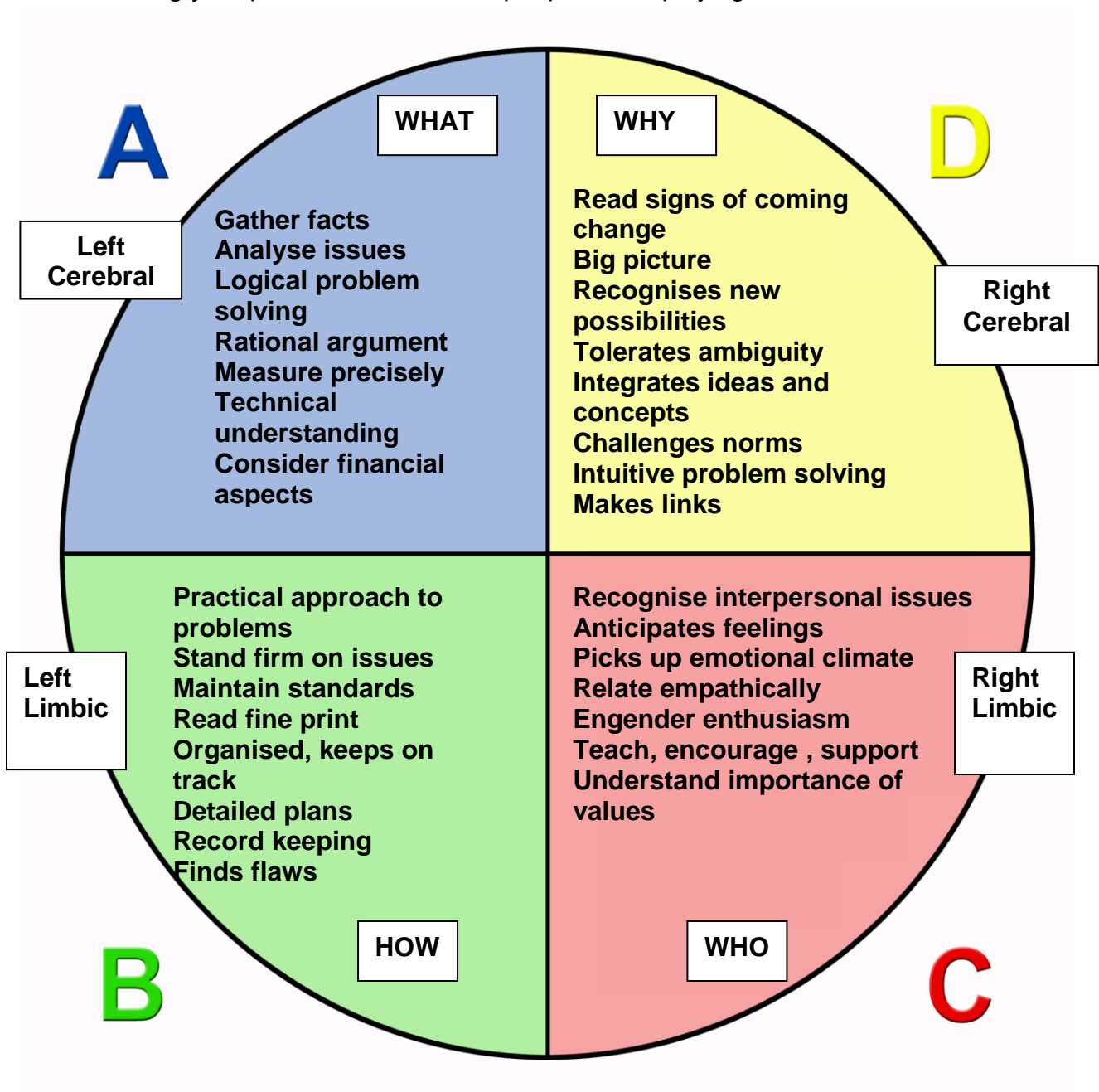


## WHOLE BRAIN ACTIVITY AND CREATIVITY AND INNOVATION

Do you prefer to....:

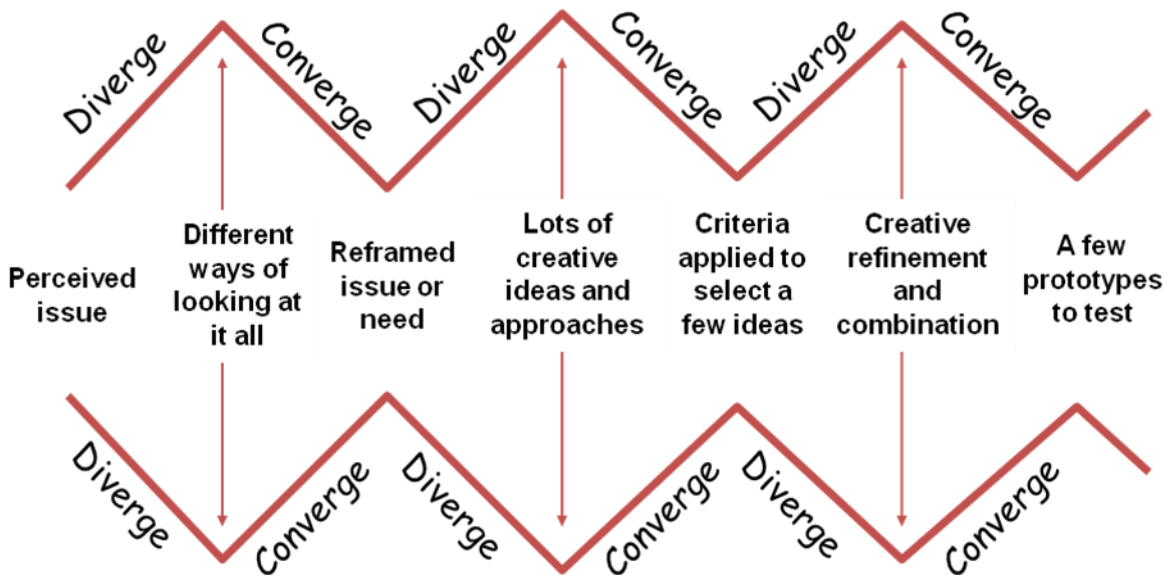
- Ⓞ Generate new and original ideas yourself
- Ⓞ Enable others to come up with new ideas
- Ⓞ Explore the options available to you and/or work with other people's ideas
- Ⓞ Making things happen and evaluating their impact within a particular context?

Both left and right thinking preferences has an important role to play within the creativity – innovation process. Thinking flexibly is about recognising and valuing your preference and other people's and playing to each others'



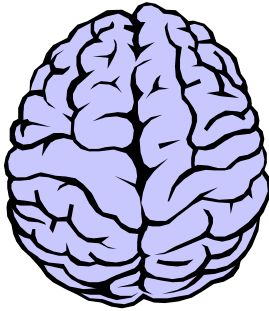
# THE CREATIVE PROCESS - USING WHOLE BRAIN THINKING

Two types of thinking are needed for the creative process:



**DIVERGENT THINKING** uses the imagination to generate ideas and expand possibilities ie right brain preferences. Focus on quantity.

**CONVERGENT THINKING** uses analysis and judgement to reduce the list and select the best options for action ie left brain preferences. Focus on quality.



## MIND MAPPING



### *What Is It?*

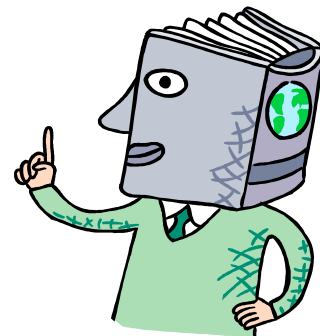
**"It is a tool that mirrors the way in which the brain stores and retrieves information."**

Tony Buzan 1974 created this '**WHOLE BRAIN**' technique using an understanding of how the brain functions to make analysis, planning and memory processes more efficient.

An **ASSOCIATION BURST** is the first step in mind mapping . The first associations provide the branches from which other ideas grow along **ASSOCIATION CHAINS**. These first **BASIC ORDERING IDEAS** shape and steer the development of the mind map, like the chapter headings in a book.

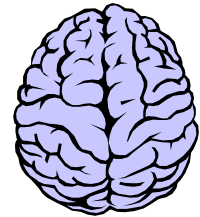
Mind maps enable you to be more efficient as they:

- Give you an overview of a large subject/area
- Enable you to plan routes, make choices and let you know where you are going and where you have been
- Enable you to gather and hold large amounts of data
- Encourage problem solving by showing you new creative pathways
- Are enjoyable to look at, read, muse over and remember
- Attract and hold your eye and your brain
- Let you see the whole picture and the details at the same time - Gestalt view
- Help you to understand and absorb information more easily
- Help you to recall information more quickly
- Help you to feel more relaxed and in control of your time
- Enhance your creativity



## MIND MAPPING & THE LHS/RHS PREFERENCES OF THE BRAIN

Aspects of Mind Mapping that appeals to the LHS and RHS of the brain:



LHS	RHS
<ul style="list-style-type: none"> <li>• Ordered &amp; Rational</li> <li>• Facilitates Analysis</li> <li>• Uses Key Words/Nouns</li> <li>• Uses lines</li> <li>• Groups ideas &amp; facts</li> <li>• Has a structure</li> </ul>	<ul style="list-style-type: none"> <li>• Uses colour &amp; pictures</li> <li>• Incorporates Perspective</li> <li>• Facilitates a 'gestalt' view</li> <li>• Uses symbols &amp; metaphors</li> <li>• Visually spatially attractive</li> <li>• FUN</li> </ul>

### MAKING MIND MAPS EXCITING:

**Colour**

size

Stick Men



Symbols



Visual Onomatopoeia



**CAPITALS**

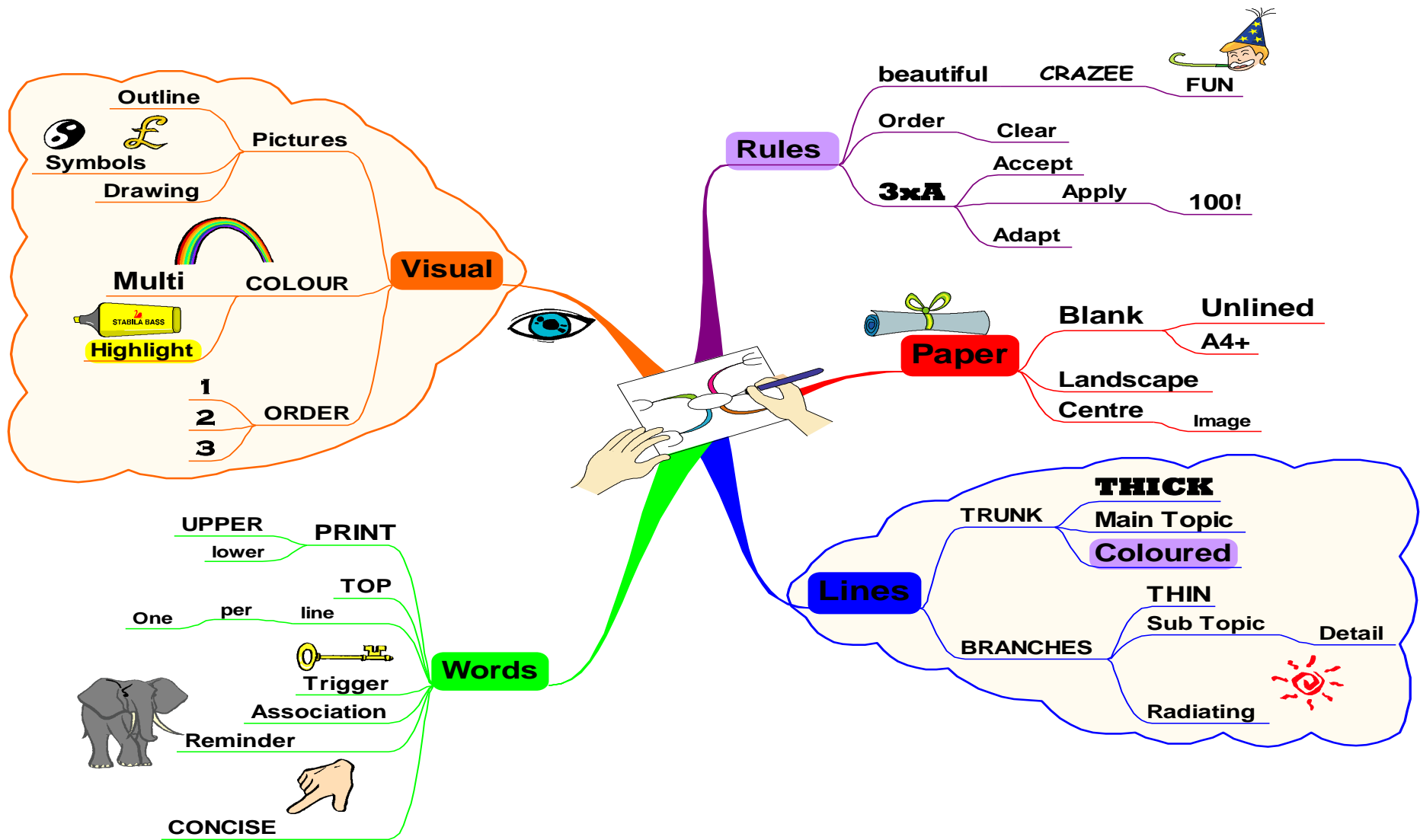
**Bold**

Underlining

Style



**Accept.....Apply.....Adapt**

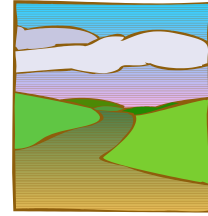


## WHEN TO USE MIND MAPPING

<b>Uses</b>	<b>Benefits</b>
<b>Learning</b>	Reduce those 'tons of work'. Feel good about study, revision and exams. Have confidence in your learning abilities.
<b>Overviewing</b>	See the whole picture, the global view, at once. Understand the links and connections.
<b>Concentrating</b>	Focus on the task for better results. Using all of your cortical skills attracts your attention.
<b>Memorising</b>	Easy recall. 'See' the information in your mind's eye.
<b>Organising</b>	Be on top of all of the details for parties, holidays, projects or any other subject.
<b>Presenting</b>	Speeches are clear, relaxed and alive. You can be at your best.
<b>Communicating</b>	In all forms with clarity and conciseness
<b>Planning</b>	Orchestrate all details and aspects - from beginning to end - on one piece of paper
<b>Meetings</b>	From planning to agenda, to chairing, to taking the minutes... the jobs are completed with speed and efficiency.
<b>Training</b>	From preparation to presentation they make the job easier and much faster.
<b>Thinking</b>	Having a method to analyse thoughts - almost a 'way-station' for them.
<b>Negotiating</b>	All the issues, your position and manoeuvrability in one sheet.
<b>Brain Blooming</b>	Brain-storming in which more thoughts are generated and appropriately assessed
<b>Problem Solving</b>	To gain new insights and ideas re possible solutions

## STIMULATING CREATIVITY

The associative nature of our brain means that when faced with issues we respond by thinking in ways we've been taught to think and come up with predictable 'usual' ways of doing things. Our mental locks are 'be logical' and 'be practical'. Edward de Bono refers to these as the 'mental valleys' we are stuck in.



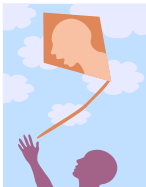
To be creative or innovative we need to break out of these 'mental valleys' and use **LATERAL THINKING** to find new solutions.

Paul Plsek proposes three mental processes to stimulate creative thinking:



### **ATTENTION** - Focus on your mental valleys

What assumptions, patterns, rules are limiting your perspective?  
How could you look at it in a different way?  
Attention involves looking closely and really noticing things.



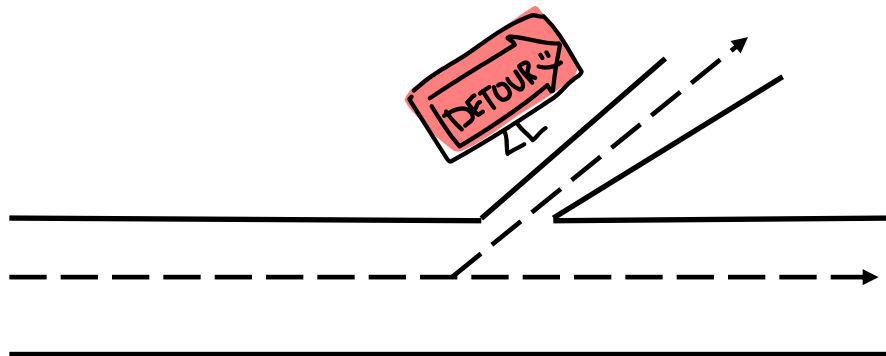
### **ESCAPE** – From your mental valley

How can you 'think outside the box'?  
Escape means deliberately moving away from the current situation.



### **MOVEMENT** – Away from the usual routes

How can I free up my imagination to go wandering?  
Movement involves generating ideas without judgment or criticism





## LOOK BEFORE YOU LEAP



The start of any search for improvement begins with an analysis of the current situation. If we stay thinking about the situation we are in from the usual perspective we can end up with the same solutions we've used before. The changes are likely to be improvements on what's there already rather than fundamental different ways of doing things.

To find new ideas we need to **ESCAPE** from our usual ways of seeing things and rethink or reframe the issue as well as the solution.

### DETECTIVE WORK

Picking up clues is key to being creative, in relation to solving a problem this means going out and pay **ATTENTION** to what's happening first hand and seeing what you notice. Alternatively, go and look in a different area that has to deal with similar issues, what goes on there?..... in a hotel, a supermarket, an airport.



### OTHER'S POINT OF VIEW

Instead of looking at the situation from your perspective and getting locked into the usual way of seeing it, consider how a person who knows nothing about the situation would see it..... how might they describe the issue?

Car salesman

Teenager

Parent of small child

Stand up comedian

Airline flight attendant

Newspaper reporter

Shop assistant

Hotel manager

Farmer

Aim to generate by brainstorming 5-10 alternative ways of seeing the issue to stimulate thinking about it in a different way. This can then provide a different starting point to generate ideas about the change needed.

### CHANGING THE WORDS

The aim of this is to find alternative ways to express the issue in simple statements and free from jargon. The usual words tend to confine us to our mental valleys, by stating the issue differently we get a new perspective on it.

Tip: think about how would you explain the issue to a Man from Mars or a small child.

### WE WANT TO THINK CREATIVELY ABOUT.....

After reframing the issue aim to end up with 3-7 statements to take forward to the next step....generating ideas

## GENERATING MORE IDEAS

The key here is 'anything goes', however wild or whacky all ideas are accepted. The aim is to switch off your critical left brain thinking and stimulate creative right brain thinking. Brainstorming or brainwriting ( see appendix) are useful tools here to enable us to **ESCAPE** from our mental valleys and go beyond the obvious.



## OTHER WORLDS

Think about the issue might be dealt with in setting or a completely view point. What connections can you make with the ways things are done in other settings? Randomly select one from the list below:

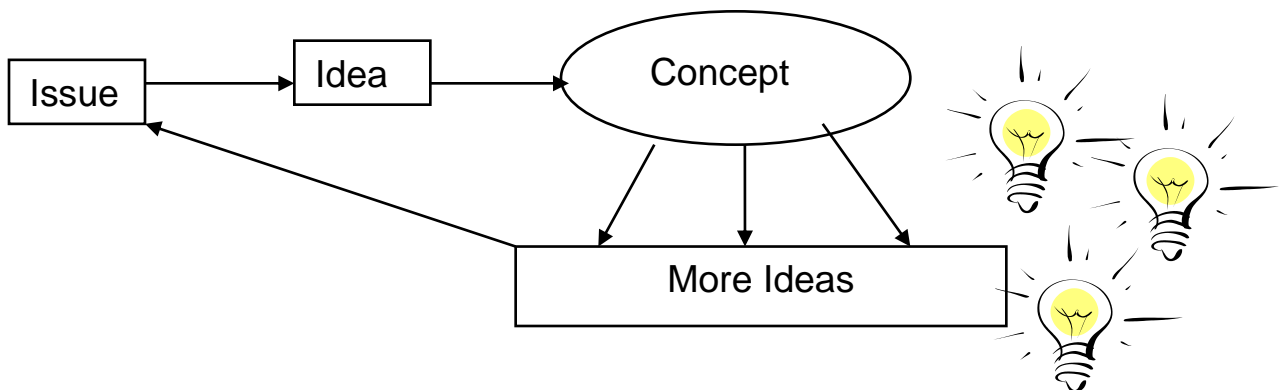
Airline	Computers	Garage	Military
Animal Kingdom	Dance	Hotel	Manufacturing
Astronomy	Entertainment	Interior decorating	Movies
Architecture	Fast Food	Insects	Photography
Ballet	Funeral Home	Jungle	Restaurants
Basketball	Football	Law	Travel Industry

## WHAT IF?

Much of what we do is what we've always done and has become the 'rule'. Accessing new ways of doing things comes from exploring and challenging the rules and assumptions underlying how things are done and asking what if we did it differently.

## WORKING WITH CONCEPTS

Start with your issue and generate an idea about how to deal with it. The idea can be outrageous and completely impractical. Now draw out from the idea what is the *concept* behind it ie how would it help with the issue. The concept then can act as a stepping stone to other ideas.



# FREE WORD ASSOCIATION

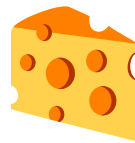
Edward de Bono suggests that thinking patterns in some circumstances require deliberate alteration to provide stimulation and new approaches. He says:

*'The use of random stimulation is fundamentally different from vertical thinking. With vertical thinking one deals only with what is relevant. In fact one spends most of one's time selecting out what is relevant and what is not. With random stimulation one uses any information whatsoever. Nothing is rejected as useless. The more irrelevant the information, the more useful it will be.'*

The technique generates external stimulation. This then acts on the idea from outside by helping **ESCAPE** to a new entry point to the problem.



'...one deliberately mixes in an unconnected piece of information in order to disturb the original pattern'.



This technique works best when:

- a totally new approach is needed
- the group or individual has exhausted all possibilities
- you need to kick-start the ideas process

## How to use Free Word Association

First, outline your challenge and write it down.

Choose a word at random from the dictionary or the Free Word Association sheets in this workbook. (See Appendix)

Write down the random word you have chosen and brainstorm any ideas which come up in association with it, let the mind run free, encourage mental **MOVEMENT**

There is no one correct way to use the random word. Words generated could include: puns, opposites, wrong spellings' etc.

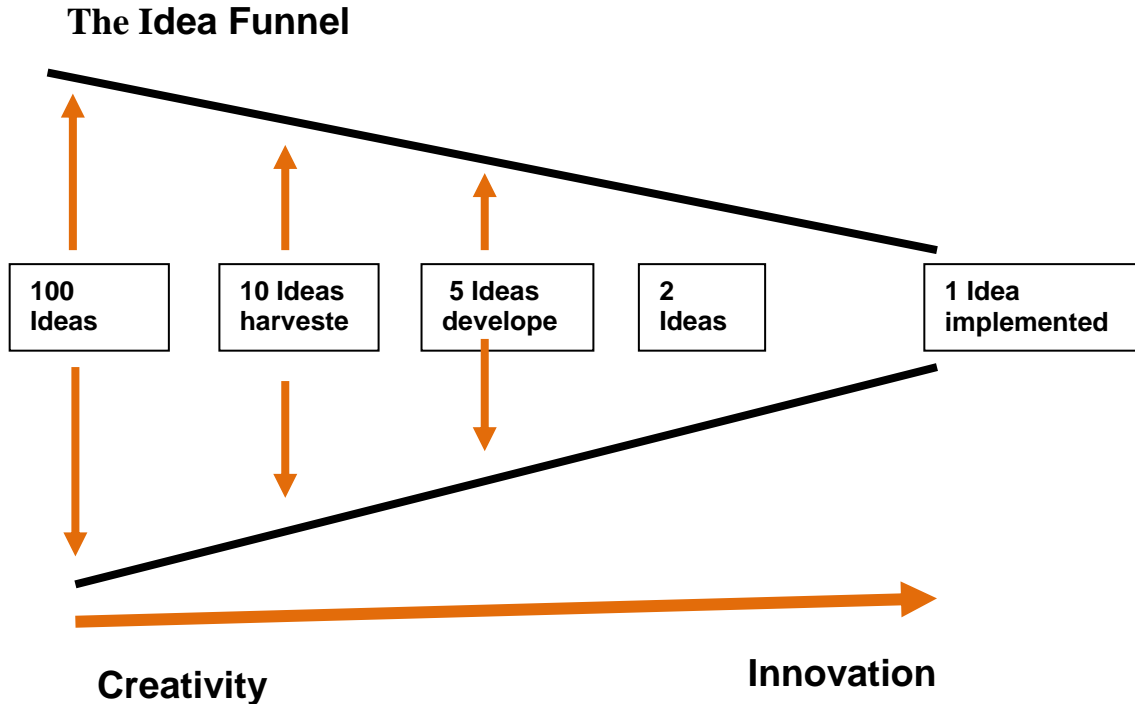
Develop new ideas by creating connections and associations between the identified problem and the brainstormed thoughts. Go beyond your first answer; look for a second, third, fourth and fifth possibility.

This technique requires tenacity – you may find that you have to work quite hard to find the associations.



## FROM IDEAS TO INNOVATION

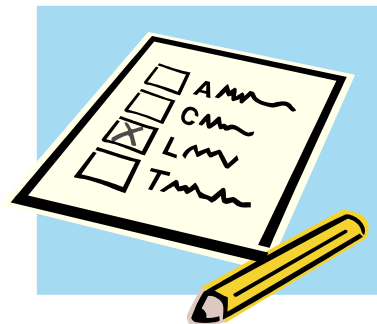
Once ideas have been generated now is the time to focus down on those that fit the criteria for success. Some of the ideas may not be immediately useful, being flexible means taking time to work on several possibilities and not seek 'the right answer' too soon.



Harvesting the best ideas involves judging them as to which will be best. To do this the criteria that determine what is best need to be considered.

**Is it feasible?**  
**Is it attractive?**  
**Does it meet the needs?**

You need to tease out more detail and agree with others involved what the specific criteria will be. Selecting the best ideas to go forward can be done by grading the ideas against the criteria or by asking individuals involved to vote for their preferred idea.



## MEETINGS OR MAYHEM

The value of different individuals having different ways of thinking can be useful as it can generate **creative abrasion** which stimulates far more creative and robust thinking to resolve differences.

However, sometimes the different ways people think and behave can result in challenging and frustrating debates and discussions.

### ***Q. What problems do you currently experience in meetings where there is difference in viewpoint?***

What is happening results from **ADVERSARIAL** thinking which means that often progress is slow and decision hard to reach. Individuals are at cross purposes as they think about the issues at different ways at the same time. What is needed is a methodology that will

- escape traditional argument and confrontation
- allow a cooperative and objective view of the subject
- involve everyone
- look systematically at the issue from all angles
- facilitate true *dialogue*

This can be achieved by **PARALLEL** thinking in which individuals think in the same way at the same time about the issue.



### **Edward De Bono's SIX THINKING HATS**

The six hats represent six modes of thinking and are intended as a framework that will provide a *direction* for thinking rather than *labels* for thinking.

In Meetings, the methodology can:

- Reduce the negative impact of 'fixed' opinions
- Promote a higher level of contribution
- Create options and facilitate solutions

Six Hats is intended for use as a team tool. Ideally everyone in the meeting needs to be familiar with the tool and signed up to using it. Everyone participates in exploring the issue from a particular perspective wearing each of the metaphorical hats at the same time as everyone else.

## The Six Hats:



### Red Hat thinking

**What's our gut reaction to this?  
What do we feel or sense about the issue**

Red Hat thinking covers intuition, feelings and emotions. It allows the individual to put forward an intuition *without any need to justify it*.

Typically group members are often uncomfortable with individuals just expressing an emotion or gut reaction regarding an idea. The individual is usually challenged to support their 'feeling' with objective evidence. The consequence is that feelings 'go underground' trapping the individual into one perspective, which tends to a strongly cautious or negative one.

Using the Red Hat at the start of a discussion will enable the group to get a sense of the degree of agreement around the issue.



### White Hat thinking

**What do we know?  
What information is available?  
What information do we need?  
What information is missing?**

This covers facts, figures, information needs and gaps.

Facts come in two forms:

**Checked Facts** have been verified by the individual(s) putting them forwards.

**Believed Facts** have not been verified but are believed to be true. Believed facts are O.K. to be used so long as everyone is clear that they are believed and have yet to be checked .



### Yellow Hat thinking

**What are the positives?  
What are the benefits?  
What's attractive about the idea?  
What will help this to work?**

This is the logical positive. Why something will work and why it will offer benefits. It can be used in looking forward to the results of some proposed action, but can also be used to find something of value in what has already happened.



### Black Hat thinking

**What are the negative aspects?  
What could some of the difficulties be?  
What do we need to be cautious about?**

This is the hat of judgement and caution. It explores negative aspects and risks. It acts as a brake and therefore care is sometimes needed as to when it is introduced to ensure that the brakes are not applied too early.

The black hat is used to point out why a suggestion does not fit the facts, the available experience, the system in use, or the policy that is being followed. The black hat must always be logical.



### **Green Hat thinking**

**Are there other ways of doing this?  
What are the possibilities?  
What will overcome the difficulties?**

This is the hat of creativity, alternatives, proposals, what is interesting, provocative and challenging. The Green Hat can be used to generate alternative ideas or solutions to address the negative aspects of the proposal.

The green hat likes 'off the wall' thinking and 'thinking the unthinkable'. Here the group can use creative techniques such as brainstorming. Caution needs to be applied to resist moving in and out of black hat mode in response to green hat thinking.



### **Blue Hat thinking**

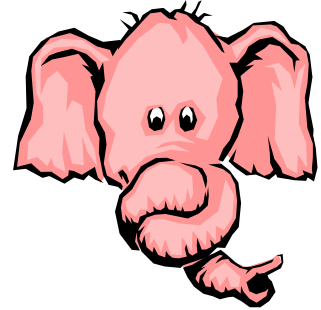
**Are we all keeping to the 'hat'?  
Do we need to change hats?  
Where are we up to?  
What have we decided?**

This is the 'Chair Hat' which can either be taken on by the facilitator of the group or everyone has a responsibility for its purpose, which is to manage the process. The Blue Hat looks after timing and ensuring everyone is participating and staying 'in the hat'. Blue Hat also summarises and checks for consensus

## **TIPS ON USING THE HATS**

- use the white hat early on to ensure there is enough information to work with
- use only a short time for the red hat emphasising that individuals do not have to justify their 'gut reaction'
- use the yellow hat before the black to counteract our natural tendency to look first for negatives!

# Memory Techniques



THE AIMS OF THE MEMORY SECTION ARE TO

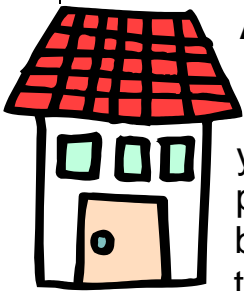
- IMPROVE YOUR MEMORY
- BOOST YOUR CONFIDENCE
- ASSIST YOUR COMMUNICATION SKILLS
- ENHANCE YOUR PRESENTATION SKILLS

Everything we ever do or say involves memory. Our memories make us who we are and the level of confidence we have in our mental powers is central to the way we approach life.

By learning how to use it effectively, we can approach work with confidence and enhance our communication and organisational skills. Most people think they have poor memories but there are techniques that can help memory development and recall that are fun to learn and call on.

The key to memory techniques –A E I O U

**ASSOCIATION**  
**EXAGGERATION**  
**ORDER**  
**IMAGINATION**  
**UNUSUAL**

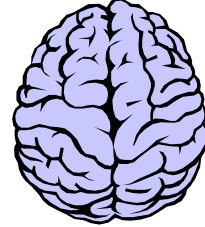


## A trip round your house!

To remember ten different people take a mental trip round your house and at a different location for each **imagine** the person doing something **unusual**. To remember the list go back round your house and use the **associations** you made to recall each person.



## PROBLEM SOLVING PATTERNS



We tend to have stereo-typical patterns in how we approach the matter of problem solving hence the fact that in reality, both individuals and organisations spend a lot of time 'problem processing' when they are supposed to be problem solving.

*There are two predominant thinking patterns:*

### CRITICAL THINKING

Analytic  
Convergent  
Vertical  
Probability  
Judgement  
Focussed  
Objective  
The Answer  
Verbal  
Linear  
Reasoning  
Yes, but

### CREATIVE THINKING

Generative  
Divergent  
Lateral  
Possibility  
Suspended Judgement  
Diffuse  
Subjective  
An Answer  
Visual  
Associative  
Richness, Novelty  
Yes, and

***Effective problem solving requires the interaction of both patterns of thinking and the appropriate use of each pattern at the relevant point in the process.***



## Thinking

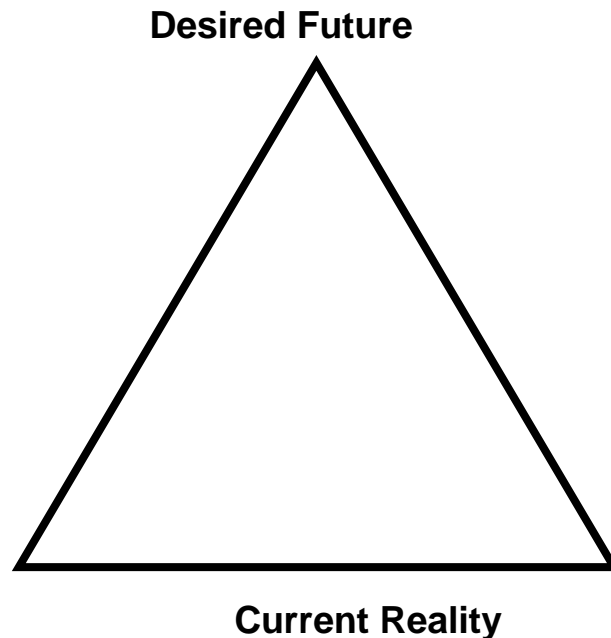
***Breakthrough Thinking*** is, in essence, what the name suggests, '*breaking through*' traditional ways of seeing, thinking and doing. This means turning 'things' upside down, be they ideas, strategies or ways of doing things, looking at them from the inside out and breaking a few golden rules.



The Breakthrough approach is committed to identifying strategies and approaches to enable both individuals and organisations to proactively *breakthrough* apparent brick walls and inertia to change. The intention is to turn the 'we can't do that' into 'we haven't yet or we need to find another way of doing this if we are to achieve that.' By suspending the judgemental and logical left brain and stimulating the creative and imaginative right brain a more positive and 'can do' attitude is created.

Breakthrough Thinking has its roots in Business and the need to be proactive and continually scanning the market for the need or opportunity to do things differently either to reach the top or to ensure that the business stays at the top. Breakthrough thinking is about more than being radical in how you think and act. It is grounded in a clear framework to harness the energy generated and maximise creative potential.

Breakthrough thinking (Harvard Business Review 1999) uses brainstorming ( see Appendix 1) as a way of generating lots of ideas for action to take to address an issue. It also takes a 'solution focused' approach which 'lifts' the focus to the future where with a more positive mind set, the resources to solve the problem and overcome difficulties can be accessed.



**Process:**

- Identify the current reality
- Describe the desired future eg: This service will have moved smoothly from a five day a week to a seven day a week service
- Transport yourself to the future so that it has now happened. When is the time now? Describe in detail what success looks and feels like.  
eg: "A seven day a week service has been successfully introduced"
- Brainstorm on to the triangle answers to.....What did you do, who with and how?
- Keep asking "what else" till you have exhausted the steps that would have had to have been taken.
- Include questions that tease out the detail ' and how did you do that?' The aim is to ensure the core issues are addressed and not just the surface ones.
- Examine the brainstorm and create an action plan by putting the activities in the order they would be done ie now using a critical thinking skills.

## Appendix 1 The Art of Brainstorming

Alex Osborn (1948) described brainstorming as:

‘a conference technique by which a group attempts to find a solution to a specific problem by amassing all the ideas spontaneously by its members’

### How to Brainstorm

When posed with a question  
eg ‘ what could we do?’

Use a large unlined piece of paper  
Write as many ideas as possible down in limited space of time Write ideas down randomly (not in a list)  
Include everyone’s contributions  
Keep going after the initial rush of ideas  
Include crazy, funny, impractical ideas  
Make no judgements about any of the ideas as you go along  
Aim to fill the paper  
Use different colours

### How Brainstorming Works

The theory behind brainstorming is that it triggers creative ‘right brain’ thinking rather than the usual critical ‘left brain’ thinking. Speed, humour, colour, abandoning logic, freedom from judgement mean that possibility takes the place of probability and the brain is stimulated to generate more and more ideas. Inhibitions are reduced when there is less pressure to come up with the ‘right’ answer. Once lots of ‘answers’ are displayed, critically assess the options by shifting to ‘left brain’ thinking.

### Reverse (Negative) Brainstorming

The brainstorm is conducted in exactly as above but the question is the reverse of what you want to find a solution for:

Eg How can we make sure we don’t solve this problem?

The output from this brainstorm is then taken and explored to see if any new ideas for a solution are suggested

## Brainwriting

Each person writes a problem at the top of the page. It can be a different problem for each person and it can be all the same for everyone, for example if you are all focused on the same problem.

If the ideas are for an individual, then they may put in their name, so the page can eventually find its way back to them.

Now each person passes on the sheet to another person, who writes down one or more ideas to solve the problem.

You can use different schemes here, including:

- Each person adds one idea.
- Each person adds one row of ideas (usually four or five).
- Each person adds as many ideas as they like.

Early ideas in particular should be very creative, as they are to act as stimuli for later problems.

Keep going until you are done

The sheets are now passed on to the next person, who adds more ideas, *using the existing ideas as stimuli* where possible.

The sheets are passed around until they are filled up. You can then add more sheets or stop when a page is full. Eg

<b>Problem:</b> Get to the airport on time				
<b>Owner:</b> Jane Dow				
Ride on a clock	Grow your own wings	Take a taxi	Do work at airport	Never leave the airport
Set alarm on watch	Hire a helicopter	Order taxi beforehand	Take the train instead	Take a later plane

Brainwriting enables people who have ideas but are concerned about voicing them in a broader group to anonymously make them visible. They thus do not have to 'compete' with others to be heard.

It also helps that all ideas are visible and can be easily scanned to trigger new ideas.

It can speed things up because everyone is offering ideas all of the time.

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## **GENERAL CREATIVITY RESOURCES**

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### **USEFUL INTERNET RESOURCES**

Most of these links also provide a list of other sites that may be of interest and it is a list that is growing day by day.

[www.businesscreativitynetwork.org.uk](http://www.businesscreativitynetwork.org.uk)    [www.COCD-Creativeitsdag](http://www.COCD-Creativeitsdag)  
[www.creativityatwork.com/index/htm](http://www.creativityatwork.com/index/htm)    [www.cre8ng.com](http://www.cre8ng.com)  
[www.directedcreativity.com](http://www.directedcreativity.com)    [www.edwdbono.com](http://www.edwdbono.com)  
[www.enchantedmind.com/htm/tools/htm](http://www.enchantedmind.com/htm/tools/htm)    [www.gidn.org](http://www.gidn.org)  
[www.infinn.com/innovationhouse.html](http://www.infinn.com/innovationhouse.html)    [www.gocreate.com](http://www.gocreate.com)  
[www.innovating.com/page-16html](http://www.innovating.com/page-16html)    [www.omega23.com/creativity.html](http://www.omega23.com/creativity.html)  
[www.quantumbooks.com/Creativity](http://www.quantumbooks.com/Creativity)    [http://creatingminds.org/index.htm](http://http://creatingminds.org/index.htm)  
[www.innovation.ccl/rev-arts/creativity7.htm](http://www.innovation.ccl/rev-arts/creativity7.htm)  
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