

# **The Creativity Tool Box**

**A Practical Guide for Facilitating Creative  
Problem Solving Sessions**

**Second Edition**

**By  
Elspeth McFadzean PhD**

**To Euan and Calum  
who both inspired me from my mouse mat**

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## **Further Information**

If you would like to contribute any new techniques, please contact us at the address below. If your technique is printed in a later addition of this book we will acknowledge your contribution and will send you a free copy of the Creativity Tool Box.

We are also interested in how you utilise these techniques. If you have any interesting stories or would like to share some information about supporting group processes please write to us at the address below. For more information about TeamTalk's products and services please write or call at:

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# Introduction

The Creativity Tool Box has been developed for practising facilitators and managers. It is meant as a guide to help facilitators when they are developing their agendas and meeting structures.

It can be argued that companies may innovate on a more regular basis if groups and individuals can be encouraged to think more creatively. This book is one tool that can be utilised to help people to think more imaginatively. It had been divided into five sections: Theoretical Concepts, Creativity Techniques, Warm-Up Exercises, Puzzles and Learning from Creative People.

The book is not meant to be a panacea but will enable interested parties to dip into the world of group facilitation. The Theoretical Concepts section therefore presents a short summary of some of the major issues surrounding this process. These include group development, team roles, creative problem solving and group productivity.

The sections on Creativity Techniques and Warm-Up Exercises give full instructions on how they should be used. Of course many facilitators tend to change techniques to fit in with their particular situation. That is inevitable.

I would be interested to know how people use these techniques and would be glad to hear from anybody who would like to share their experiences with me.

The penultimate section presents some puzzles that will illustrate how important creativity can be to problem solving. For example, the nine-dot puzzle demonstrates the need to expand the boundaries of the problem if it is to be solved.

The last section – called Learning from Creative People – illustrates how the innovators of the past and present have developed creative ideas through a combination of perseverance, curiosity, luck, the willingness to take risks and the enjoyment of the project. These are essential ingredients to creativity.

Finally, this book is supposed to generate ideas for productive and effective meetings. One important way of achieving this is by having fun. I therefore wish you all the best and have fun!!

Dr. Elspeth McFadzean

# Theoretical Concepts



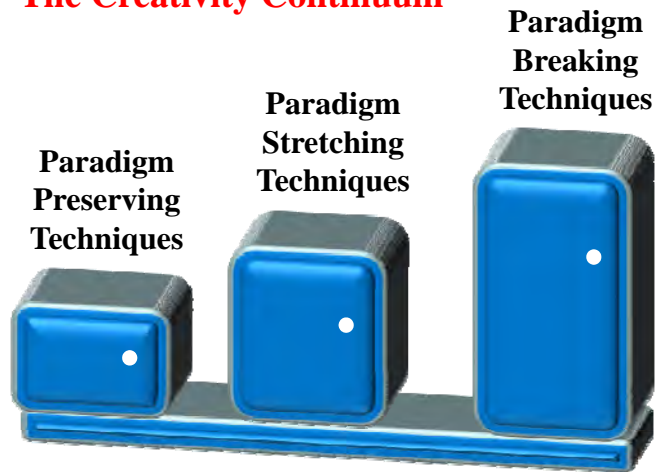
# The Creativity Continuum

We are all unique individuals who express ourselves in different ways. Although perhaps we do not feel creative, everybody has the potential of developing novel and very innovative ideas. This can be encouraged by utilising creative problem solving techniques. Some techniques, however, are more creative than others. Consequently, I have developed a creativity continuum ranging from paradigm preserving techniques to paradigm breaking techniques (see model). These are explained below together with some examples. People who use the paradigm preserving techniques tend to enjoy using structured methods whereas participants who use paradigm breaking techniques tend to thrive on the unknown and are happy to use intuition, inspiration and imagination to drive them towards innovative ideas.

Paradigm preserving, paradigm stretching and paradigm breaking techniques are useful because they help you to:

- Encourage creative thinking in a more structured and safe manner.
- Generate a comprehensive and wide list of novel ideas.
- Look at the situation or problem from a multitude of perspectives.
- Gain enthusiasm and ideas from your greatest resource – people.
- Construct a more effective, synergistic and productive team.
- Present and develop your ideas more effectively.

## The Creativity Continuum



	Paradigm Preserving Techniques	Paradigm Stretching Techniques	Paradigm Breaking Techniques
<b>Problem Boundaries</b>	Unchanged	Stretched	Broken
<b>Use of Imagination</b>	Not Necessary	Necessary	Necessary
<b>Expression</b>	Verbal/Written	Verbal/Written	Verbal/Written/ Drawing/Visioning/ Role Playing
<b>Stimuli</b>	Related Stimuli	Unrelated Stimuli	Fantasy & Unrelated Stimuli
<b>Association of Information</b>	Free Association	Forced & Free Association	Forced & Free Association
<b>Group Experience</b>	Experienced & Inexperienced Groups	Moderately Experienced Groups	Very Experienced Groups
<b>Creative Stimulation</b>	Low	Medium	High

Source: Adapted from McFadzean (1996)

# Techniques for Effective Meetings

In order to develop novel and innovative solutions, a team can utilise a number of creative problem solving (CPS) techniques. The Creativity Tool Box presents instructions for a variety of different types of CPS techniques. They have been grouped into three categories, namely paradigm preserving, paradigm stretching and paradigm breaking. Moreover, the Creativity Tool Box also describes a number of exercises that can be utilised by the facilitator as energisers, icebreakers, warm-up exercises and methods of introduction.

In addition to the instructions for undertaking both the CPS techniques and the warm-up exercises, information is also given on the following:

- The type of situation that the technique can be used for. For example, idea generation, problem identification, implementation planning, as an energiser or icebreaker and so on.
- The type of group that the technique can be used for. For example, paradigm preserving techniques can be used by all the groups described in the section “The Attention Steps”. In general, however, paradigm breaking techniques are best used by those groups who have attained level 5 on the Steps.

# Creativity Techniques

**Paradigm Preserving Techniques**

**Paradigm Stretching Techniques**

**Paradigm Breaking Techniques**



# Hexagons

<b>Type:</b>	Problem Identification; Idea Generation; Evaluation and Choice; Implementation
<b>Suitable for:</b>	All levels
<b>Group size:</b>	Any
<b>Duration:</b>	1-3 hours (This will depend on the topic and the size of the group)
<b>Resources:</b>	Pads of Hexagons

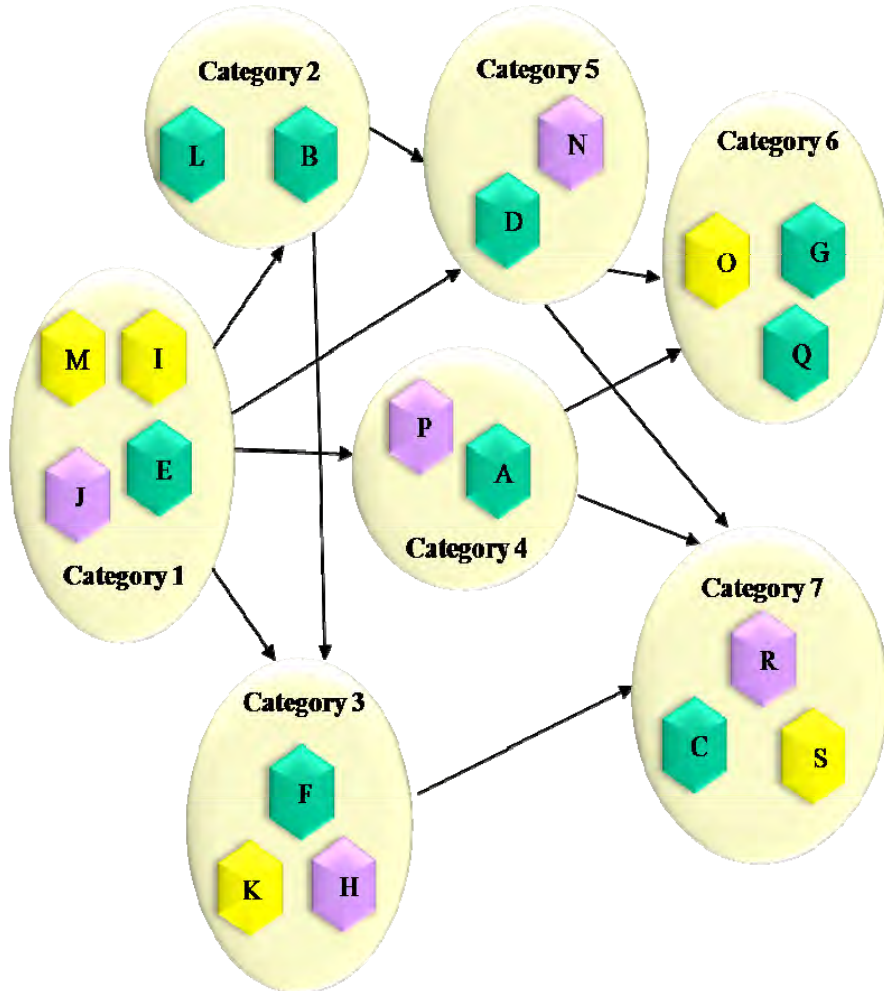
Hexagon Post-it® Notes can be used to generate ideas, sort them into categories and to develop “maps” of the problem or situation.

## Instructions

1. The problem statement is presented to the group or developed by the group. Invite the group members to write their ideas regarding the problem on separate hexagons and then to deposit them onto the centre of the table (the pool). Explain to the group that the hexagons should be used with the point (rather than the edge) pointing upwards.
2. Inform the group that when an individual needs stimulation or wants to piggyback ideas he or she can exchange his or her sheet of paper with another from the pool.

3. The process of writing ideas and gaining stimulation from other people's ideas should continue for about ten to fifteen minutes.
4. Once idea generation has been completed, ask each group member to reclaim his or her own hexagons and, one at a time, stick them on the wall. As each hexagon is stuck onto the wall, invite the author to read out his or her statement to the rest of the group and to explain it, if necessary.
5. Ask the group to browse the wall of hexagons and to arrange them into groups or categories. This may take some time. After this has been completed invite the participants to propose a name for each category. Write the agreed category name on another hexagon and put it beside the appropriate group of hexagons.
6. Next, ask the group to construct a map using a duplicate of the category names of each group. Encourage the participants to draw the relationships between each category e.g. Category 1 may be more important than Category 2 or Category 3 may need to be implemented before Category 7 and so on. The relationship used will depend on the task given to the problem solving group.

## Example of a Hexagon Map



# Collage

<b>Type:</b>	Problem Identification; Idea Generation
<b>Suitable for:</b>	Levels 4 and 5
<b>Group size:</b>	Any/Very large groups should be broken into syndicates
<b>Duration:</b>	60-90 minutes (This will depend on the topic and the size of the group)
<b>Resources:</b>	Paper; Flip chart; Coloured pens; Glossy magazines; Glue; Tape

Building a collage can not only be enjoyable for the group but can help the participants to gather a variety of different pictures or captions that can act as unrelated stimuli for idea generation.

## Instructions

1. Write a brief statement of the problem on a flip chart.
2. Distribute glossy magazines to each participant, together with two large pieces of paper and some glue. Invite the participants to construct two collages each. The collages may be a metaphor of the situation e.g. a vehicle or an animal. The first collage should depict how each participant would like to see the situation in the future (i.e. a possible solution). The second collage should be a representation of how the participants see the problem at the present time.

# Child Labour

<b>Type:</b>	Introductory Exercise; Ice Breaker
<b>Suitable for:</b>	All levels
<b>Group size:</b>	Any
<b>Duration:</b>	10-15 minutes
<b>Resources:</b>	None

This technique is useful both as an icebreaker and as an introductory exercise.

## Instructions

Ask each member of the group to spend one minute describing their job as if they are describing it to a young child.

This exercise should help to demolish any hierarchical anxieties and should provide the group with some fun as well as some pertinent information.

# Biography



# Biography

Dr Elspeth McFadzean gained her PhD on executive decision making from Brunel University and is currently an Associate Member of Faculty at Henley Business School (Reading University), the University of Surrey's School of Management and the University of Liverpool. She has written the MBA elective in Creativity for two management schools and is presently Lead Tutor for Creativity at Henley Business School. In addition, Elspeth has carried out extensive research on group problem solving, creativity and decision making. She also works as a consultant where she uses her knowledge of creative problem solving, team building and decision making technology to facilitate high profile meetings. She has conducted consultancy projects in many industries including the financial sector, the health service and manufacturing. Elspeth has also written numerous articles on group processes, facilitation and creative problem solving in journals such as *Management Decision*, *Harvard Business Review*, *Creativity and Innovation Management* and *Leadership and Organization Development Journal*. Moreover, she has been interviewed for national newspapers and journals including the *Times* and *Harvard Business Review*.