## Look beyond the obvious

(Creative thinking)

Purpose	To demonstrate to participants that there often is more than one of approaching the issue of problem solving. We just need to be a little bit creative.
Application	This session offers a light-hearted and nonthreatening way for people to consider approaches to problem solving. Often most people fall into the trap of thinking that there is 'only one way', or waiting for the manager to come up with the solution. Creative people exist in virtually every team. It just needs to be teased out
What happens?	After the minimum of briefing, the participants work to try and solve a puzzle. There will be frustration from most, with some just giving up There will also be pleasant surprises in relation to those that can solve the puzzle The session ends with the participants committing to try and 'look beyond the obvious' when solving problems.
Resources	<ul> <li>Overall time required: 45 to 60 minutes.</li> <li>5 minutes for introduction and initial briefing</li> <li>10 minutes for participants to try and solve the problem</li> <li>30 to 45 minutes for, debrief and discussion.</li> </ul> Materials and resources <ul> <li>A Flipchart Stand with Blank Pads</li> <li>Paper, Pens or Pencils for Participants</li> </ul>
How do I do it?	INTRODUCE THE TASK The following simple nine dot diagram should be drawn on a flipchart:

Participants should then be given the following instructions:

- You should try and join the nine dots using only four straight lines
- You must start from any position and draw the lines one after the other
- Once the nib of a pen or point of a pencil touches the paper it cannot be lifted. Each line starts where the last line finishes.

## The Solution



## How did you solve the puzzle?

Think back to how you were solving the puzzle. Did you solve it by trial and error or did you think through a strategy? Spend 30 seconds thinking about how you solved it and what changes in your thoughts you needed have to get you there.

"Knowledge is created by the learner, not given by the teacher." If you are trying to learn something, then you will need to think about it. We are not trying to teach you anything you do not already know, you are merely using us to remind you of things you want to remember.

The beauty of this nine-dot puzzle is that you literally have to "think out of the box"to solve the puzzle. Your pencil or mouse must go outside the box of the dots to beabletosolveit.

The most frequent difficulty people have with this puzzle is that they try to draw all the lines within the dots and they do not initially want to draw lines outside it because:

	<ol> <li>There is nothing outside the set of dots to associate to. There are no dots to join a line to outside the puzzle so they assume a boundary exists.</li> <li>It is assumed that doing this is outside the scope of the problem, even though the problem definition does not say you are not allowed to.</li> <li>You are so close to doing it that you keep trying the same way but harder</li> </ol>
A	Lessons to be learned from this puzzle
	Look beyond the current definition of the problem.
Noto	• Analyse the definition to find out what is allowed and what is not.
Note	• Are there any real rules to the problem anyway? (especially valid in human related problems - there are only perceptions, not physical rules)
	Look for other definitions of problems.
	• Do not accept other people's definitions of problems. They may be either wrong or biased.
	<ul> <li>If a problem definition is wrong, no number of solutions will solve the real problem.</li> </ul>
	Investigate the boundaries
	• What are the boundaries which the solution must fit into?
	Are the boundaries your own perceptions or reality?
	What are the possibilities if you push the boundaries?
	What are the benefits of small boundary changes?
	Hard work is not the solution
	<ol> <li>Repeating the same wrong process again and again with more vigour does not work.</li> </ol>
	2. You can be very close to a solution while not getting any closer to it.
	3. Thought is the solution; physical hard work will not work.
	• To help teams think more proactively and differently in relation to solving problems at work
When?	