



Dr Amantha Imber works as the head 'inventiologist' at Inventium, where she helps organisations think more creatively using science-based techniques. Amantha has a doctorate in organisational psychology, which means that she can read minds more accurately than most. Amantha can be contacted on 02 8705 6055 or via email at amantha@inventium.com.au. www.inventium.com.au

Amantha Imber analyses the physical work environment and muses about what windows and walls have to do with wacky ideas. One of the keys to creative thinking is being exposed to a large amount of stimulus.

Room with a view.

As you walk into your office building and catch the lift up to your desk every morning, you probably don't give much thought to the walls, doors and windows that surround you. And why should you? It's not like the physical environment of workplaces has an impact on the bottom line or anything.

Or is this true? Recent research into the matter would suggest it does. One's physical surroundings actually have a huge effect on creative thinking skills and innovation, which of course affects the bottom line of an organisation in a big way.

As you've been sitting at your desk trying to work today, you have possibly been staring intermittently out the window (if you're lucky enough to sit near one). And if you've been having a bit of a gaze outside, then you've actually been doing wonders for your creativity.

There have been several scientific studies conducted that have compared the effects of an office where nature, or even a view of it, is in abundance, compared to offices in which it is not. Creativity has been found to be significantly higher in the 'nature' offices, both in relation to how conducive the environment is perceived to be for creativity, but also in how people perform on an idea generation task.

If you are stuck in an office in which the windows face directly onto another office building, or are not near a view of a park or the sky, there are still ways to bring the natural environment inside.

For example, placing a pot plant on your desk will bring greenery to your immediate surrounds. Likewise, you can encourage your company to use furniture that is made from natural materials, as opposed to plastic or synthetic ones. And, if all else fails, stick up some pictures of rainforests and waterfalls on the wall.

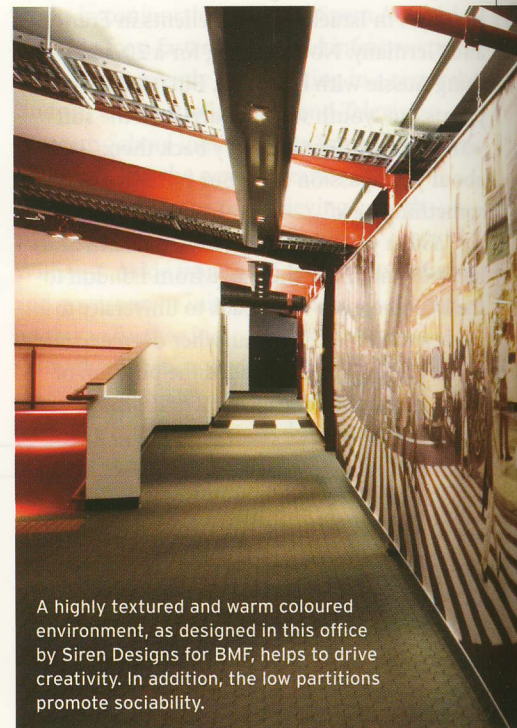
Many have long believed that purple is the colour of creativity and imagination. Not so. It is actually warm colours such as red and orange that promote divergent thinking. This effect occurs because warm colours tend to make us feel happier than cooler colours. And when people are happy, a chemical called dopamine is released in their brain, which makes information flow more freely. Encouraging free flowing thoughts in one's brain is a neurological way in which idea generation and lateral thinking skills can be increased.

In an ideal world, your company would give you permission to go and paint the town (or at least a few rooms) red. Even a warm-coloured feature wall can help immensely. If painting the walls is off limits, then try to ensure that objects surrounding your desk incorporate warm colours, such as an orange lamp, or red and yellow folders.

Despite what designers say about minimalism making an office look professional and modern, such a design actually hinders creativity. One of the keys to creative thinking is being exposed to a large amount of stimulus. Exposure to random stimuli triggers more thoughts in the brain, which improves creative thinking ability. An environment that contains many objects and textures is much more conducive to lateral thinking.

Offices that have exposed pipes, asymmetric lines, and unusual and varied furniture are very effective at driving lateral thinking. If your landlord won't let you rip open the ceiling to expose some pipes, then take a trip to IKEA where you can find inexpensive, bright and unusual bits and pieces with which to fill your office space. Your local Vinnies can also be great for hunting down some quirky and interesting treasures.

Researchers at Cornell University actually combined these three ideas of having natural



A highly textured and warm coloured environment, as designed in this office by Siren Designs for BMF, helps to drive creativity. In addition, the low partitions promote sociability.

surrounds, being exposed to warm colours and having an office design that is full of objects and textures. They compared such an environment to one that was coloured in cooler tones and stark, with no natural views. They then asked a group of people to engage in a creativity-related task. Independent judges found that those in the former, more creative environment performed 50 percent more creatively on the task compared to their counterparts in the stark space.

The sociability of a workplace has also been put under the microscope in scientific studies. Daniel Stokols and his colleagues from the University of California measured the effect of a social work environment on creativity. The study showed that environments in which individuals found that co-workers were

always around for the exchange of ideas and thoughts led to greater creativity and satisfaction at work.

Companies could utilise this finding by having an open plan office, and one in which partitions are low enough to be able to talk to the person sitting opposite. Incorporating more casual social interaction spaces, such as groups of couches and beanbags for the exchange of thoughts to occur, is another way organisations can promote sociability and thus creativity.

Objects or pictures that relate to the concept of deviance, such as a photograph of

Vyvyan from *The Young Ones*, are also likely to promote divergent thinking. This hypothesis was tested in a study conducted across German and US universities.

In this study, participants were allocated into one of two groups. Participants in Group One were seated in front of a poster that had 16 Xs of the same colour arranged in a four by four matrix. Those in Group Two were seated in front of a similar poster, with the sole difference being one of the Xs was a different colour to the rest. All participants were then asked to come up with as many uses for a brick as possible.

Those who were seated in front of the 'deviancy' poster came up with ideas that were independently judged as being around 25 percent more creative than the 'conformity' group. In addition, the deviance group came up with significantly more ideas than the conformity group.

The researchers explained that the anomalous X activates unconscious thoughts in people that relate to deviance and originality. The activation of these thoughts fosters a greater quality and quantity of ideas.

Exposure to a wide range of information is another method that has been proven to enhance divergent thinking abilities. In a study conducted at Drake University in the US, this very concept was tested. The researchers asked one group of people to undertake an idea generation task without being exposed to any stimuli prior to the task. A second group of people was required to read a list of 60 random, unrelated pieces of information and then complete the idea

generation task. Those in the latter group performed significantly better on the idea generation task.

These findings suggest that exposure to lots of unrelated information has a very positive impact on getting the creative juices flowing. The good news is that there are a number of different ways in which you can use your physical space to deliver random information to your team. Emailing around one random fact per day, pinning up a different article every day on the back of the toilet door, subscribing to a trend-spotting site and sticking up a new trend over the kitchen sink once a week, are all ways to effectively increase divergent thinking capability.

Finally, we all know what happens when we have been working in an environment for a few months – we start to take it for granted and tend not to 'see' or notice what surrounds us. Everything starts to fade into a hazy grey background. As such, it is critical that you change the physical environment often. For example, it may be that every month, a set of employees are tasked with bringing in new furniture or posters and perhaps donating the old ones to charity.

I would encourage you to let this be the last day you take your surroundings for granted and assume that they have no effect on employee behaviour. There are numerous simple changes that you can make immediately that will increase your creative thinking abilities at work. Employees' ability to think creatively is what leads to brilliant innovations, which, of course, have a big impact on the company bottom line. **M**

