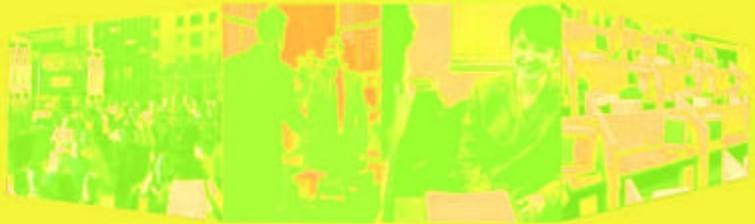


Brian Clegg



**Instant
Brainstorming**

*Generate
new ideas
now!*

First published 2006

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Using this book

Why this book?

Brainstorming – having a group session to generate new ideas – is a common enough exercise in business. In fact, the chances are there's one going on somewhere near you right now.

Unfortunately it's probably not a very good brainstorm. Everyone does them – hardly anyone knows how to do them well. This book, written by one of the UK's top experts in business creativity, will help you get brainstorming right, and get real value out of the exercise.

Why instant?

You just don't have time to study a great tome to deal with something as everyday as brainstorming. It has to be quick, and it has to be now.

How the book works

Unlike many of the other books in the *Instant* series, which are designed to provide a resource kit of techniques, *Instant Brainstorming* is here to lead you as quickly as possible through a single process. Because of that it is kept as short and focussed as possible. There is a little information on creativity at the end of the book, but that is an optional extra. The important thing is to get value out of your brainstorming.

What brainstorming is

Idea sourcing

Brainstorming is a term that is much misused – but the intent is simple. It's a way of extracting ideas from a group of people. Brainstorming isn't something you do alone, nor is it purely an inspiration session. It's about producing ideas, collecting them and making something of them.

Back to Osborn

Those who mangle the process of brainstorming – and there are many of them – forget its origins. Brainstorming was devised by Alex Osborn, one of the founders of the hugely successful New York advertising agency BBDO, and the grand old man of modern practical creativity techniques. Where many people go wrong is in thinking that brainstorming is just a matter of throwing up ideas in a group, and doing so without filtering those ideas or criticising them. In fact, Osborn had something very different in mind.

When brainstorming was devised, Osborn imagined using a creativity technique, a means of stimulating new ideas, then using brainstorming to collect and structure the ideas being stimulated by the creativity technique. He never envisaged using the brainstorm without that technique to kickstart the ideas. This is why so many brainstorms fail.

Your role

Any good brainstorming session needs a facilitator – someone to concentrate primarily on the process, though unlike other types of facilitation, there is nothing wrong with a brainstorming facilitator throwing ideas into the pot, as long as he or she shows no favouritism. This book assumes that *you* are going to be the facilitator in the session. It is still useful if you aren't, but you may have to take the facilitator to one side and explain one or two points (which might not make you too popular) if that's case. It might be best to buy a copy of the book for him or her too. (See www.cul.co.uk/titles/instantdownloads.htm for details of our excellent value licences, so you can get copies for everyone.)

Seven quick steps

In fact, a successful brainstorm needs seven key steps. This doesn't mean it has to be a long, drawn out process. The whole thing can be achieved in five minutes – or it can take five hours, depending on the nature of the task. But keeping these seven steps in mind as a mental checklist will make for much more effective brainstorming.

We're going to cover each of the steps with a separate chapter, but here they are as a quick checklist:

1. **Establish the goal** – what is it you are trying to achieve? What is the problem? Many brainstorms have gone horribly wrong by making incorrect assumptions about what is supposed to be achieved. By spending a moment clarifying your goal you can avoid such a disaster.
2. **Inspiration** – here's where Osborn's idea of a creativity technique comes in. Instead of sitting back and waiting for inspiration to strike, we utilize a technique to kickstart new ideas.
3. **Collection of information** – this is the heart of the conventional idea of brainstorming: collecting information from the team without negative comment.
4. **Structuring output** – this may or not happen in the way many people brainstorm. It's difficult to do anything with a random set of ideas: it helps if the ideas can be structured in some way.
5. **Selecting** – a good brainstorming session will generate tens or even hundreds of ideas. It's necessary to do something with them. The selection process is to pick the best ideas or ideas to be refined and put into action first. It doesn't mean other ideas won't also be used.
6. **Refining** – the reason brainstorms traditionally don't allow negative comments is that almost every new idea has flaws. Once ideas have been selected there is an opportunity to use the group's input to strengthen them and make them practical.
7. **Action** – there's no point having a great idea and not doing anything with it. Ideas without implementation are not creative – creativity requires something to happen. In most cases (though not all) you won't be able to put the idea into action in the brainstorming session, but it is essential that the necessary action is planned.

Let's make a start up those seven steps.

1 – Establish the goal

What are we trying to do?

All too often I have been at ideas sessions where the exercise has veered all over the place, without focus. On other occasions, I've seen some superb ideas thrown up, everyone has gone away happy, and only then has the problem owner realized that, great though the ideas are, they don't actually solve the problem in hand.

For this reason, it's essential to get a clear understanding of what is required before leaping in to solve the problem. This is doubly important in a group environment like a brainstorm, because without clarification, everyone will have a different picture of what is to be achieved, so the various participants will be pulling in different directions. Not an ideal start.

I don't want problems, I want opportunities

Not all brainstorming sessions are about solving problems. Many involve coming up with a new idea, a new product, a new service, a new approach. For simplicity, though, I will be referring to the requirement as a "problem". This can apply equally well to those new idea requirements – it's just that the problem in these cases is that we don't have a new idea. (Yet.)

Some people prefer to refer to opportunities, rather than problems, suggesting that, because a problem is a negative concept, it puts us in the wrong frame of mind. This is garbage. Not only is it petty playing with language, we have a natural inclination to solve problems. In a life-threatening situation, if you don't solve the problem, you are likely to die. It's a great incentive. While, hopefully, most of your brainstorming won't be around life-threatening issues, there's nothing wrong with seeing the activity as solving problems.

Here's what I want

Any brainstorming session should have a clear problem owner. This is the person who is responsible for sorting out the problem, or who needs a new idea. Later in the process they will have the prime responsibility of ensuring that something is done with the output of the brainstorming. Right now, their role is to brief the others on what the problem is.

Problem owners should come to a brainstorming with a short, one sentence description of the problem (try starting it “How to...” to force it to be a problem, rather than a general statement), and a couple of paragraphs of plain English describing what is required.

Are you sure?

Once the problem owner has described their requirement, the rest of the brainstorming team should spend a couple of minutes probing the problem. Why is a solution required? What would happen if nothing were done? Is the problem really a problem, or is it a symptom of something larger? Is what is being described an addressable problem, or does it need to be broken down into more concrete, more manageable components?

This may be enough, or you might like to use one of the problem expanding techniques in the appendix to get a better idea of what the problem entails. The result of this analysis, whether or not you use a technique, may be to change the description of the problem to something more appropriate, or merely to leave the brainstormers better prepared for their task.

Either way, don't take long over it. It can be tempting for a dedicated problem owner to spend an hour describing all the intricate detail of the problem. Don't let this happen. Too much detail can cramp the creative process. Make sure that the problem owner keeps tightly focussed, and don't allow this step to take longer than ten minutes.

2 – Inspiration

The missing step

There's nothing like a missing step to trip you up, and here is the gap in the way many brainstorming sessions are carried out, compared with Osborn's original vision.

Inspiration is a wonderful thing. Traditionally it has been a matter of waiting for the elusive spark to strike. Sitting in a garret, waiting for the idea for the great novel, or sitting round a meeting table, waiting for enlightenment.

There's an excellent illustration of the reality of this situation in an episode of the Simpsons, where a set of TV executives are brainstorming an idea for a new reality show. What do they do? Grab their pocket TVs and flip through the channels until they can find an idea to steal.

The fact is, very few of us are capable of coming up with a great idea when the boss is looming over us, thumping the table, yelling "I want an idea, and I want it NOW!"

The missing step from the brainstorming process is making room for inspiration. You can do this in a very simple fashion. Once the team has a clear picture of the requirement, send everyone out for five minutes. Ask them to leave the building, have five minutes wandering around outside (whatever the weather). Then come back to the brainstorming session.

Although this looks like nothing but thinking time, it's actually a very simple form of a creativity technique – a mechanical device to stimulate inspiration. Creativity techniques aren't magic. They don't provide a big, light-up arrow, pointing to the solution saying "this is what you should do." However, we all have tunnel vision, limited by "the way we do things around here" and experience. Creativity techniques are designed to blast out of that tunnel and give you a new and more fruitful starting point for your ideas. They are inspiration boosters.

We are going to describe just one inspiration technique here, because it's a regular winner that usually generates a huge number of ideas. There are, however, many more techniques, and it's worth ringing the changes to keep fresh – we've listed a few more in the appendix, and you'll find many more in our companion eBook, *Instant Creativity* – see www.cul.co.uk/titles/instantdownloads.htm for more information.

How you use a technique is up to you. Most of them can be used either individually or collectively. But use the technique before the brainstorming proper to generate some new starting points.

As facilitator, you may need to explain to the rest of the brainstormers just what is involved, and why you are doing this. In the end, it's a quick method to ensure a much wider range of ideas is provided.

Random picture inspiration technique

Random picture involves selecting an image, then making any and every association that you can with that image and finally using those associations to generate ideas relevant to the problem (see the section in Chapter 9, *associations to ideas*, for more on how to do this.) Think how the associations that are generated could help with the problem. What types of solution do they make you think of? How could you change things to be like (or unlike) the associations?

Selecting suitable images requires a little thought. You should look for images that are not just a representation of a word. A photograph of a typewriter, for instance, will not give much more stimulation than the word typewriter. A picture of a typewriter with a bored secretary behind it, staring into space, would start off all sorts of stories in our minds.

Feel free to use postcards or other physical sources of pictures, though you can usually do just as well by going to a search engine like www.google.com, going to the images section and putting a randomly selected word in, then choose an interesting looking picture. Do this before you know what your problem is going to be.

This technique generates a very rich set of associations. It can also be very enjoyable once it is going, because images seem particularly good at producing way-out concepts. This technique is very reliable. We have used in 40 repeated training exercises with the same picture on the same problem, and it has never failed to produce new results.

The associations generated by this technique will tend to include some very off the wall ones. These should be forced into the idea development phase as the ideas that result will be more original.

There are two key approaches to take when using random picture before a brainstorm. Either each individual can write down their associations, and generate a set of ideas, or the team can work individually at the association stage, then all the associations can be collected as the first part of the brainstorming proper, and those associations used by the whole team to generate new ideas. Either way, as individuals come up with ideas, other members of the team can use “yes, and...” (see next section) to spring off them to go even further.

3 – Collection of information

The real thing

What most people mean by brainstorming is really this third step, collection of information – but collection in a very specific way. As facilitator, you have a crucial role here. You must ensure that the team are taking the right approach, and that all the ideas are captured. It's difficult, but not impossible, and very rewarding if you get it right.

Being prepared

The first essential is being able to capture the ideas as they are generated. Traditionally this is done on flipcharts, though you may also use computer software or sticky notes (see the next section for some thoughts). Make sure you have enough paper and pens that work. As the session begins, you must capture each suggestion as a short phrase. Work the audience. Tell them to hang on, if you are losing track. Turn towards the board to write, then turn back to the brainstormers, inviting them in with an open arm to get things flowing again. You are like a conductor with an orchestra at this point. If you have a big group, or find this very difficult, you might like to consider being a double act. Get an assistant to do the actual writing, while you as facilitator concentrate on feeding the ideas through to the note taker, and slowing down the flow if they are coming too fast.

Be very careful not to edit as you go along. All too often I have seen brainstorming facilitators edit out an idea by simply ignoring a suggestion, or laughing at what appears to be a humorous remark and passing over it. At other times they have re-phrased a suggestion and totally changed the meaning. It's okay to compact a lengthy suggestion into a few keywords, but it's very important that you don't change the meaning.

No negatives

Perhaps the best-known, yet most easily ignored aspect of brainstorming is the restriction on negative criticism. Do not let anyone get away with criticising another idea. As soon as it starts, cut them off, politely but firmly, explaining that the whole mechanism of brainstorming requires no negative comments. All new ideas are fragile green shoots that are easily criticized. (is that a mixed metaphor? Never mind.) They need time to grow and develop before thinning out.

It's also important the brainstormers stay in a positive frame of mind. We aren't good at operating in mixed modes of thought. Once we get into confrontation mode, we lose our ability to come up with new ideas and concentrate on shooting down the opposition. By staying away from confrontation, avoiding criticism and argument, you can keep the ideas flowing.

Yes, and...

As well as stopping criticism, offer your team an alternative. Tell them about this at the start of the session, and remind them of it the first time someone criticizes (and it will happen). If you hear an idea which you think can be bettered, don't say what's wrong with it, say how it can be improved, how it can be a stepping stone to something better. By starting "yes, and..." you are affirming the other person's idea and building on it, rather than shooting it down. This is classic effective brainstorming. Don't comment on someone else's idea, unless it to offer another idea that builds on it.

4 – Structuring output

Re-writing

By now you will have filled one or more flipcharts with ideas. Before doing anything with them, it's a good idea to give them some structure. This will make it easier to select ideas and carry them forward.

A sticky solution

A very useful approach when brainstorming is to use Post-its® or similar sticky notes. Each idea, as it emerges, is written on a separate note. You can do this in the traditional facilitator fashion, as described previously, or each person can have a pile of sticky notes which write on themselves and bring up individually, announcing the idea, so other brainstormers can build on it. At the end of the collection phase you will have a flipchart, or a wall, covered in Post-its.

The result at this stage is less effective than simply writing up the ideas, as the need to write on a relatively small sticky note will make the writing less readable from a distance. This may seem to make this a pretty useless idea. But here comes the good part. Get the whole team up and out of their seats and give those notes some structure. It's best to use a wall or other large flat area for this – if you have to use flipcharts, make sure you've got several. Group the notes by type of idea. If two notes are effectively different versions of the same idea, stick one to the other. Very soon, what was a random set of ideas will begin to gain a practical form.

An alternative, if you don't like using sticky notes during the active brainstorm, is to collect ideas normally on a flipchart, then while the rest of the team have a coffee break, the facilitator copies the ideas onto Post-its, to use in the structuring process.

There are all sorts of possibilities for ways to undertake the structure. If it's a complex idea that has several stages in a process, then the notes can be put in the right order for that process. It's probably best to initially group ideas on their similarity, but you may then want to restructure to reflect, for example, the resources required to make the idea work, or the potential payback from the idea.

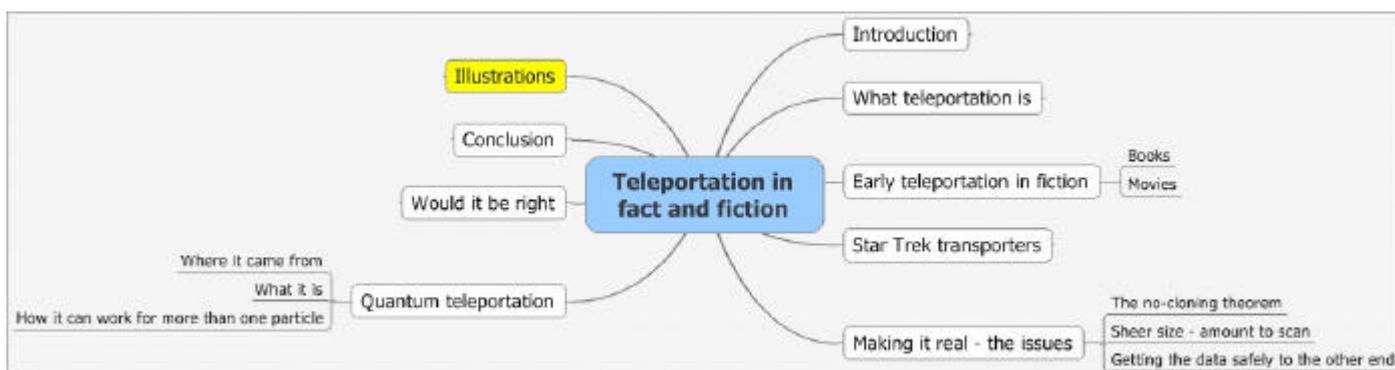
The way of the spider

One other approach to structuring that's worth considering is the spider diagram or cognitive map, best known through the form devised by Tony Buzan, the Mind Map®. This involves giving the ideas structure by writing the short statements over the branches of a tree-like structure that grows out from the centre of the page.

The advantage of a Mind Map or an equivalent cognitive map in the brainstorming environment is that it is very easy to add extra structure as you go – much more so than with conventional note-taking (though it's probably beaten on flexibility by sticky notes).

It's even better if your note-taker (almost definitely not the facilitator if using this approach) can use a piece of computer software that's projected onto a large screen to collect and structure the ideas. This kind of software is now very sophisticated, and has the big advantage of being able to automatically balance the diagram.

Here's a simple Mind Map, produced using MindManager® - you can find out more about this and other cognitive mapping software at www.cul.co.uk/software



5 – Selecting

Only the good stuff

By its very nature, brainstorming is non-selective. The whole concept involves letting ideas flow without hindrance or any kind of filtering. This means that you should end up with a whole range of ideas, some everyday and obvious, some bizarre and unlikely.

This is a point where the whole brainstorming process can fall apart. It's all very well to have all these ideas, but what are you going to do with them? You can't use them all – many are totally impractical – what are you going to do?

Here is a simple technique to select an idea or ideas to work with. Note that the ideas you *don't* select haven't been discarded. You can always come back to them and work on other ideas as well – the selection you are about to make is only a starting point. Assuming you have undertaken step four, you may well have some ideas grouped. If they are similar enough, consider them a single idea for the purposes of this exercise.

Give everyone in the group a notional £100 (or \$100) and instruct them that they can spread this over the ideas in any way they choose. They can put all £100 onto one idea, they can split it over two 40:60 (or any other ratio) or they could even put £1 onto 100 different ideas. This "bidding" is to be undertaken individually.

Once everybody has had an opportunity to bid, add up the money attached to each idea and the idea with the highest amount is taken forward. (If there's a tie, let the problem owner choose.)

It's vital, before starting, that everyone is assessing the ideas using the same criteria. Whenever we make a choice, whether it's conscious or not, we use a set of criteria to decide which option to go with. Often when selecting ideas we go for the most practical and reasonable. But that just doesn't work here. If the obvious, practical, reasonable idea was viable, it would have been already implemented. The reason you've gone for brainstorming is likely to be that the obvious solutions don't work.

So it's essential at this stage that your team members DON'T use practicality as a criterion. Instead they should use appeal as their primary criterion. Which idea(s) are most appealing? Which really make you think, "Yes!?" Put some money on them. If you want a secondary criterion, look for ideas with the best return on investment – but usually appeal is enough.

Before expecting everyone to select this way, explain why. It's much easier to take an appealing but impractical idea and modify it to inject practicality than it is to take a dull but practical idea and make it appealing. In the end it's the appealing ideas that will be implemented. You need an appealing idea, especially if it involves innovation. The idea you select is not going to be

implemented just as it is – remember, in step six you are going to enhance it. So every team member should make sure they really are selecting ideas that seem exciting, inspiring and groundbreaking, rather than dull, practical and ineffective.

6 – Refining

Making a good idea better

Things are happening fast now. We've got an idea – the one that scored best in section five (remember you can always go back and look at other high scoring ideas too) – now let's make it even better.

As with the other steps in the brainstorming process, it's possible to take a long time over this – and it may be with some major problems that this is necessary. But we are focussing on keeping brainstorming quick and vibrant, but with added effectiveness.

Here's a speedy way to improve your idea.

Start by listing the key points that are good about your idea. There should be between about three and ten points in all. If you can't list three good things about your idea, then it's a little worrying that you selected it as most appealing. If you come up with more than ten, you are getting into too much detail – condense those positive aspects down. These positives should identify *why* the idea is appealing. What's good about it, and why is it a good way to approach your problem. This should take no more than two to three minutes.

Next turn the approach on its head. List three to ten things that are bad about the idea. What's wrong with it? What needs fixing? Again, two to three minutes should be enough to pick out the real negatives.

Finally, quickly work through those negatives and look for quick fixes. How can you remove the negative, either by changing the idea itself or the way that it is implemented? This is where practicality comes back into process. You want to keep the idea superb, but make it practical. It is essential, while you make these fixes, that you keep the positives in front of you. Make sure as you fix the negatives that you aren't, at the same time, pushing out the things that make the idea great. You can see this happening all the time with government legislation. What starts as a great idea gets so watered down by the process that it loses most of its good attributes – don't let this happen to your idea.

This tweaking process should not usually take more than a few minutes. It may be that you have a really superb idea, but there's one huge blocking problem. If so, you may have to spend longer doing a brainstorm on solving that problem – but it's rarely the case.

At the end of this quick refinement process you should have a better, more practical idea, but one that hasn't lost its essential appeal.

7 – Action

No implementation, no idea

There really is no point in being creative if you don't do anything with the idea. The final stage of brainstorming should be to make sure that someone goes out of the room with the task of putting the idea into place. Occasionally you may be able to implement the idea on the spot, but more often that won't be possible. Don't worry – that's perfectly normal. But do make sure that the problem owner, or some other designated person goes out with a clear mission to make the idea happen – and to keep the others up to date on progress.

It can help to make this possible to put together a very brief outline plan. What is going to happen by when? Who is going to need to be involved? What are the essential checkpoints along the way? This isn't a major project planning exercise, just a basic assessment of what's needed to make things happen.

8 – Brainstorming complete

Seven steps escalator

That's it. The brainstorm is complete. It doesn't have to take anywhere near as long as it took you to read those seven sections. Here's the compact version of a brainstorming action plan to take into your meeting:

1. **Establish the goal** – be clear about what you are out to achieve. Briefly question the problem owner, and be prepared to use a quick problem expanding technique. At the end of this step you should have a single sentence statement of the problem in the form “How to...”
2. **Inspiration** – use a technique to gain initial inspiration. This can be simply going out of the building for five minutes, individually, and thinking about the problem, or a structured technique like Random Picture.
3. **Collection of information** – get the ideas together. No criticism, and encourage use of “Yes, and...”
4. **Structuring output** – consider using sticky notes or cognitive mapping to give your ideas a better structure than a scrawled list.
5. **Selecting** – you can't implement everything. Select using £100 (\$100) bids, based on the criterion of appeal.
6. **Refining** – take the selected idea and make it better. First identify 3 to 10 positives, then 3 to 10 things wrong with the idea. Finally fix the negatives, while keeping the positives in place. Remember you can change the idea itself or the way it is implemented. But keep it appealing.
7. **Action** – make sure the problem owner, or another designated individual is tasked with making the idea happen. Go out with some basic milestones in mind and with the requirement to keep the brainstormers informed of progress.

That's it. Brainstorming that really works. So don't make excuses. Do it right.

9 – There's more to creativity

A bit more

That's all you need to know to brainstorm, but this short chapter gives a little more information on creativity in the business environment. It's optional – but I'd recommend giving it a quick read.

What is it?

It is possible to know that you really need something without being sure what it is - creativity is a bit like that. The problem with creativity is that it's a blanket term for several related things. There's artistic creativity, the production of a book or painting or piece of music that is in some way original. There's the creativity of discovery, whether it's Archimedes leaping out of his bath shouting "Eureka!" or a new product concept. And there's the creativity of humour. There is something special about humour, because it involves seeing the world in a different way, and that is an essential for creativity.

It is true that much business creativity concentrates most on the second of those types. We are looking for the solution to a business problem, or an idea to come up with a new product or service. Yet in reality, almost every act of creativity merges the three. To really be innovative, the chances are there will be elements of artistic creativity present - whether it's in the elegance of a business plan or the style of a design. And to be creative effectively usually demands the presence of humour. If this is a problem, ask yourself what you've got against people enjoying themselves, just because they're working. Does it really make sense?

What stops it?

It is often easier to stop people being creative than to enhance their creativity. We do it all the time. We have already referred to the restraints of social and educational conditioning. It's not surprising that there are social restraints on creativity. Young children have a very creative view of the world. They aren't constrained by habit and teaching. But they are also at risk from hazards they aren't prepared for. Some of our creativity is pushed aside to keep us safe. Yet when using creativity to solve a business problem we are in a safe, cushioned environment. We can afford to take more virtual risks; in fact we need to if something new and wonderful is to emerge.

In education, creativity is frowned on, because it runs counter to the desired output. Like it or not, our education system is largely designed to get young people through exams. This means getting

them to give the answers the examiners want. Not the most original answer, not the creative answer, but the single right answer that is on the answer sheet. Real life isn't like that. Any problem, any requirement is likely to have many right answers. When we need to get creative it is because the obvious answer isn't good enough. Someone else has already done it. It has already been tried. We need something new and different.

If being creative means taking risks, appearing silly (most great ideas sound crazy initially) and failing more frequently, we've another problem. These traits are not popular. As individuals, we don't like them. Corporate culture is generally very heavy on failure. "You only get one chance to make a mistake here." Even very constructive measures like total quality management (TQM) have their downside, because the implication is that failure is always bad.

Yet there's only one way to be really original. To throw off restraint, and go for it. There will be lots of failure, but it shouldn't matter because failure is the best basis for learning - and it is only by sticking your neck out that you will also achieve real creativity. One of the best ways to improve creativity quickly is to prevent the fresh green shoots of new ideas from being trampled on by practicality. Until everyone is prepared to come up with something they think will sound silly, knowing it won't be laughed at or frowned on, you won't have a truly creative team.

As if that isn't enough, there is yet another danger. The expert syndrome. We are increasingly developing a culture of experts. Expertise is one of the prime commodities we have to sell. Yet expertise can be dangerous when it comes to creativity. Expertise depends on knowing a lot about how things have been before. And experts know what *isn't* possible. While the best experts can then flexibly interpret a different situation, all too often expertise means tunnel vision when faced with the new. We should be looking for creative input beyond those who are very closely involved in a project or business if we want real innovation. Don't throw your experts away, but take your input more widely.

The five weapons

In any business there are five significant areas where effort can be applied to enhance creativity. They are:

- ✦ Culture
- ✦ Techniques
- ⊖ Environment
- ✦ Personal Development
- ✦ Fun

An organization's culture can make or break creativity. If it's considered a good thing to challenge the status quo and come forward with ideas, then the organization can expect a good culture of

creativity. If it's dangerous to put your head over the parapet, and the organization clamps down on those who want to think differently, then creativity will not thrive whatever else you do. Getting the culture right is essential – and it's not easy.

Second up are techniques. These are simple mechanisms to stimulate creativity. We'll come back to them in the next section.

Then there's the environment. The physical environment can have a strong impact on creativity. We all tend to have times of day when we're more creative – and should make use of them. A room that is noisy, too hot, too cold, uncomfortable, without natural light – all these can damage creativity. It's always worth considering changing your environment when you want to be creative. Get out of the office. Take a walk. Have a meeting somewhere different. Environment will influence output.

The fourth key is personal development. We all have a certain degree of creativity. This can be enhanced – by learning creativity techniques and practicing them (just like a sport, you get better at using techniques the more you use them). By developing wider interests and getting different types of input to your thinking process. By reading different types of book.

Finally there's fun. Having fun doesn't mean you're being creative, but if, during the creative process you aren't having fun there's something wrong with the way you are doing it, because creativity *ought* to be fun.

Why techniques?

The main enemies of creativity are tunnel vision and lack of inspiration. Either we know too much about the past to do anything but continue trudging down the same path, or we haven't got the vision to see a new destination. The idea of a creativity technique is to push you away from that well trodden path. To get a different viewpoint, by forcing you to do something you wouldn't normally do. This can be uncomfortable, but it is the only way to make something happen.

This explains why something as mechanical and often irrelevant seeming as a technique can have such stunning results. Creativity techniques aren't creative; you are. What they are superb at, though, is pushing you to a different starting point, providing you with an opportunity to make new associations, helping you take a fresh view and come up with something completely different.

Associations to ideas

Many creativity techniques we describe require you to make associations with something and then relate these associations back to the problem or requirement. Rather than take up space within each of the techniques explaining this process we have tried to give an overview here that will serve for all of them.

In some ways this is the hardest part of the creativity process, although even this isn't as hard as some would have you believe. This is the point where you take a mechanical technique and apply genuine creativity to it. This aspect of the process is highly dependent on experience. The more you do it, the easier it will become. Because of this, I strongly advise regular practice using creativity techniques, even if you don't have a specific problem to solve. This is particularly important when you are new to the field of creativity.

Let us assume that you are trying to develop a new confectionery product and that you have used a creativity technique that has generated the following associations:

Whiskers, collar, fur, fleas, paws, hunter, after dark, mice, killer, cuddly, fun, warm, friendly, aloof, independent, lazy, active, angry, spitting, hissing, claws, teeth

With product development more than with most problem solving or idea generation you have the option of inserting an intermediate phase into the translation process from the association to the idea. This is to describe your non-existent product in terms of the association. In this case we are looking for "The <something> confectionery" or "The confectionery with <something>." For instance:

- ✦ The cuddly confectionery
- ⊖ The killer confectionery
- ⊖ The furry confectionery
- ✦ The confectionery with whiskers
- ✦ The active confectionery

Sometimes reading such a list immediate ideas will pop into your mind as to what this phrase might mean. The second stage is to write a more detailed description of this. For instance, "The confectionery with whiskers" might make you think of old aged confectionery. This could lead on to the idea of more mature confectionery. That could either mean confectionery for the more mature palette – known to be less sensitive, and strongly influenced by nostalgia – or confectionery that is matured for a fuller flavour.

On reading that through you may have seen some ideas of your own. You may have thought that the ideas I generated are not all that great. That doesn't really matter. What matters is that the process is clear. This two-stage process can be used wherever you can describe the problem in terms of a sentence in which you can insert a range of words.

Where this is not the case you must move more directly from the association words to ideas. To show an example of this let's assume that we have the same words as above but that we are trying to solve the problem of poor attendance in a factory. This is harder to create sentences for so we must move more directly.

Looking at the list, killer made me think of killing off poor attendees. Not immediately practical, but this could be developed as an idea where an attendance monitoring scheme is implemented that ultimately results in the dismissal of those with poor attendance records. Collar made me think of control and this led to the idea of high levels of follow up and checking of attendance problems – talking to everyone after they have missed a day and finding out why, insisting on doctors notes etc. Fun made me think of making the workplace more fun, so that people don't feel the need to stay away. Independent made me think of making small groups of staff responsible for their own results regardless of attendance. You can see how this works. These ideas are half-baked. This is always true at this stage of the process. Treat them like tender green shoots that need love and attention. If you trample on them too early in their lives (by evaluating them) you will kill them.

10 – Appendix: Techniques

What are these?

Throughout the brainstorming process we suggest using quick techniques to get more effective results. These techniques are taken from the companion volumes *Instant Creativity* and *Instant Teamwork*, which are also available in eBook form – see www.cul.co.uk/titles/instantdownloads.htm for more details.

Problem expanding techniques

The first pair of techniques are designed to open up a problem and understand it better, resulting in a more appropriate statement of the problem to be solved.

Problem expanding technique – The Compass

The Compass is a direction setting technique that is used to find the real problems that underlie the problem statement as presented. In order to make it work you need to have developed a problem statement; ideally one that is owned by somebody within the group - try to put it in the form “how to...” You then merely ask “why?” a great deal.

Given the initial problem statement ask “why?” In other words, “why is this a problem?” or “why do you see it like that?” or “why do you want to do that?” Whatever is the answer to this question, write it down and then probe the answer itself by asking “why” again. Repeat this process on the next answer. This continues until you feel you have hit a dead end or until it all becomes terminally dull. For instance if my problem is how to write this book faster. Why? Because I don’t want to spend so much time on it. Why? Because I want to spend more time with my family. This can continue for some time from here.

You will find that each response to each question can be rephrased to form a “how to” problem statement. Some of these will be much more fruitful areas of exploration than the original problem.

It sounds simple and it is. That is not to say that it isn’t useful. I have seen a problem entirely solved by merely rephrasing the problem statement so don’t underestimate the benefit of spending time doing this.

This is a very effective way of getting new questions and new directions from which to tackle a problem. You will find that the more you use this technique, the better you get at asking subtly different why questions that don’t sound so repetitive.

Problem expanding technique - Obstacle map

Line up three flipchart stands, or stick three sheets of flipchart paper on the wall. Start by outlining your objective. In pithy phrases, describe what you want to achieve and what things will be like when you succeed. If you are dealing with a product, this might be product characteristics or customer benefits. If you are dealing with a problem, it could be a world where the problem no longer exists. This output should be written on the far right flipchart.

Next, on the left-most chart, describe the current state. Using the same factors as the description of your objective, where are you now? What is the world like?

In between, list the obstacles to achieving your outcome. Some obstacles may be reiterations or restatements of the starting position - this isn't a problem, your starting position often is an obstacle in its own right.

Most of the obstacles you have listed can now be rephrased as “how to” statements. These form alternative problem statements, expanding your understanding of the question.

Resist the temptation to jump straight to the obstacles. It is difficult to hold all the considerations in your head at once. Putting them on paper frees you to think of one thing at a time. Also, in a group some will have different views of where you are going or even where you are starting. It is important to capture these.

You are likely to find that you generate more “how to” statements than you can use. Very often in the creative process you will generate more than you need and only use some of it. This is not a problem, it is the nature of the beast.

The ways that you write up the obstacle map can be varied immensely. Try giving each group member sticky notes, or getting each group member to work independently first. However, don't be tempted to avoid writing all three parts down.

Inspiration techniques

The second pair of techniques are designed to kickstart your inspiration and help generate fresh ideas as a starting point for the brainstorm.

Inspiration technique - Distortion

Most problems have clear dimensions. They might be spatial, numerical or time oriented. For example, if we wanted to improve a supermarket's checkouts, dimensions might include number of counters, number of staff, number of customers, size of checkout and time the checkout was open.

In this exercise, using one of Osborn's original techniques, you will take a key dimension of your problem and distort it. Make it much bigger, or much smaller than it currently is. In the checkout example you might look at the implications of having one checkout or 1,000. Having one customer or a million. Having checkouts the size of a matchbox or the size of a warehouse. Opening a checkout for one second or one year at a time. Don't try to cover everything - choose one dimension and stick with it.

When you have noted down the implications of the distortion, look back at the real world. For example, if you had chosen a matchbox checkout, you could use a direct output from the distortion - smaller checkouts just for baskets, making more space. Or you can look at an implication like having tiny staff. In the real world, tiny staff would mean lots of room behind the checkout. Is the space given to the employee getting in the way of giving good service? Could a change in space or layout improve things? And so on.

With some problems, usually the very people-oriented, it is difficult to find an appropriate dimension. If so, try another technique. It is also possible that the dimension chosen doesn't work very well. Choose another, but make sure you have really examined the possibilities first - don't skip around just because the distortion seems uncomfortable; it is supposed to.

When this technique works well, it works very well, because the dimension selected was a major restraint in your thinking.

Resist the inclination to handle multiple distortions in a single group, but with multiple teams it is well worth parcelling out the distortions to get a wider range of suggestions.

Inspiration techniques - Someone else's view

As a big blockage to creativity is tunnel vision, this technique uses another person's opinion to provide a different solution. Pick another person - historical, fictional, topical or just a role (like "plumber" or "brain surgeon"). It doesn't matter who, as long as they're a long way from you in experience and outlook. To make it easier, we've provided a list of characters below, but feel free to pick someone yourself. You needn't know a lot about this person - just enough to have a caricature of who they are or were.

Now imagine that you are this person. Get under their skin. Spend a few moments getting the feel of being them. Then address your problem. How would your adopted persona deal with the problem? How would they understand (and misunderstand) what it was all about? Get together a good list of ideas from this person's point of view.

Finally, pull the suggestions back to the real world. Are they practical? Could they be modified? What do they make you think of?

It is common for participants to reject a persona because they don't feel comfortable with it, or they feel it's unsuitable, or they have no idea who the person is. Only the last argument is valid. As long as the participant has a vague idea who they are meant to be, the persona will be valuable - and the less 'suitable' for the problem the better.

Provided the participants throw themselves into this technique, it is reliable. Without inhibitions, it is very effective.

In a team, each member could take the same person, but it is better if each takes a different one. Team members should think of their ideas separately, then pool them. At a large event with more time, this technique can be enhanced by giving participants the opportunity to dress up, maintaining their persona for a considerable period of time. As a variant, imagine phoning up an old friend with whom you've lost touch and asking for their views.

Feel free to invent your own persona, but this list will give you a prompt if you need some in a hurry. Don't try to select a person to fit the problem, pick one at random. The list is 60 long to facilitate the method popularised by Edward de Bono of choosing an item by checking the second hand of a watch.

1. Hercule Poirot
2. Sherlock Holmes
3. A Rabbi
4. A Roman Catholic priest
5. A poet
6. A trapeze artist
7. A circus clown
8. A surgeon
9. A nasturtium
10. George Washington
11. Groucho Marx
12. Karl Marx
13. Beethoven
14. A computer programmer
15. Robin Hood
16. A mass murderer
17. A pet rabbit
18. The President of the United States
19. Marilyn Monroe
20. A plumber
21. A Roman centurion
22. William Shakespeare
23. Attila the Hun
24. A prostitute in Paris
25. Queen Elizabeth the First
26. A beggar in Bombay
27. Superman
28. The Pope
29. A New York cab driver
30. Donald Duck
31. A blind person
32. Paul McCartney
33. A court jester
34. An ant
35. Billy the Kid
36. Count Dracula
37. Winston Churchill
38. A martian
39. A Star Trek character
40. Queen Victoria
41. Jane Austen
42. Oscar Wilde
43. An X-Files character
44. A World War 2 fighter pilot
45. A nurse
46. Winnie the Pooh
47. Alice (in Wonderland)
48. Bart Simpson
49. Charlie Chaplin
50. A bee keeper
51. Bill Gates
52. Margaret Thatcher
53. The Phantom of the Opera
54. Hercules
55. James Bond
56. A stage magician
57. A druid
58. Cyrano de Bergerac
59. A mermaid
60. Joan of Arc

11 – About the author

Brian Clegg is director of Creativity Unleashed Limited, one of the UK's top business creativity training companies. He has written a range of books on creativity, including *Imagination Engineering*, *Creativity and Innovation for Managers* and *Crash Course in Creativity*. A number of his *Instant* titles including *Instant Creativity*, *Instant Teamwork* and *Instant Brainstorming* are available as ebook from the Creativity Unleashed website at www.cul.co.uk/titles/instantdownloads.htm



Brian has also written three popular science books, with a fourth title, *The God Effect*, on the remarkable phenomenon of quantum entanglement due in 2006. His latest book, *A Brief History of Infinity* (Constable & Robinson UK, Carroll & Graff US) was launched with a sell-out lecture at the Royal Institution in London. He has appeared at venues from Oxford and Cambridge Universities to Cheltenham Festival of Science and has contributed to radio and TV programs. *A Brief History of Infinity*, reached #1 position on Amazon on 29th October in the Popular Science (General) and Popular Maths categories and stayed at #1 for ten further weeks.

Born in Rochdale, Lancashire, UK, Brian was educated at the Manchester Grammar School and went on to read Natural Sciences (specializing in experimental physics) at Cambridge University. After graduating, he spent a year at Lancaster University where he gained a second MA in Operational Research, a discipline originally developed during the Second World War to apply the power of mathematics to warfare and since widely applied to business problem solving.

From Lancaster, he joined British Airways, where he formed a new department tasked with developing hi-tech solutions for the airline. His emphasis on innovation led to working with Dr. Edward de Bono, and in 1994 he left BA to set up his own creativity consultancy, running courses on the development of ideas and the creative solution of business problems. His clients include the BBC, the Met Office, Sony, GlaxoSmithKline, the Treasury, Royal Bank of Scotland and many others.

Brian has also written regular columns, features and reviews for numerous magazines, including PC Week, Computer Weekly, Personal Computer World, Innovative Leader, Professional Manager, BBC History, Good Housekeeping and House Beautiful. His books have been translated into many languages, including German, Spanish, Portuguese, Chinese, Japanese, Polish, Norwegian, and Indonesian.

Brian is a Fellow of the Royal Society of Arts, and lives in Wiltshire, England with his wife and two children.