

Better Brainstorming

An IEEE Staff Learning Center Course
Part 1 - Preparing for the Brainstorm

Welcome to Better Brainstorming, a new way of taking an IEEE course! This course will be taught in three sections over three weeks. Each section will consist of reading, answering questions, and interacting with your classmates via an online bulletin board. You will be considered as having successfully 'completed' the course, and receive credit for it, if you follow the homework instructions and interact with your fellow IEEE employees.

Any questions on the course can be directed to learning-center@ieee.org.

1: An Introduction to Brainstorming - Why Brainstorm at All?

We've all been there. Head cradled in our hands, trying to think of an answer, a new way of doing something, or a solution to a problem. We have tried to look at the issue from every angle, trying to think creatively, and nothing comes to us. We need some fresh eyes and perspectives to help cast a new light on the issue.



What might we do? We might go to a co-worker and ask for their thoughts on what we are struggling with. We might ask someone to review a piece of work. We might just have a conversation over lunch about what is 'bugging' us. At times, that co-worker might give us an insight that we just did not consider. Or, the co-worker might be discussing something fully different than what we are struggling over and an idea strikes us from nowhere.

What has just happened to us is that brainstorming has helped us solve our problem. Wait, you might say, we didn't have a brainstorming session. Actually, you did. We tend to think of brainstorming as this formal process that we must follow in order to get set answers. It doesn't have to be. Just sitting with a colleague over lunch may be enough spark to get some new perspectives or have two ideas link together .



We brainstorm because we can't have all the answers ourselves. By brainstorming, we engage the collective creativity of those around us to bring out ideas that can lead to a solution. Brainstorming works by sheer volume. Any idea is allowed, because it may provide a link to a new line of thought to solve a problem. It is a social solution to a problem.

Why, then, do many brainstorming sessions fail? Well, as odd as it sounds, many fail because the structure for brainstorming isn't followed. What? We need structure for a free flow of ideas? Doesn't that sound contradictory? It does, but it is also true. Without creating and maintaining the structure of a brainstorming session, the session itself may fail.

In this course, we'll look at how to be a better brainstormer. We'll set out the preparation work you should do to foster a good brainstorming environment, how you should run your brainstorming session, and what to do with the feedback you get after brainstorming. Along the way, we'll provide you with tips, hints, and templates to get your brainstorming to the next level. Ready? Let's go!

2: Setting the Mood - Preparing for a Brainstorming Session

Can we just gather a group of people together at the last minute, put them in a room, give them a problem, and expect to get a solution? Of course we can! Is it going to provide the best answers? Not in the least. In order to have a great brainstorming session, we need to prepare for it. This includes the right environment, the right thought stimulators, the right people, and the right questions. Let's look at all of these.

The Right Environment

We're all different. Some people like to sit and think. Others prefer to get up and wander around to stimulate thought. Some will like to throw things around while throwing around ideas. Some prefer no distractions. Others prefer to look out a window. By providing the right environment, we foster imagination and creativity. Let's take a look at some of the right environmental factors.



Make sure the room you are using for your brainstorming is big enough for the group to move around, as well as have room for easels to take down ideas. It has to have adequate ventilation so people are concentrating on the goal of generating ideas and not on how hot or cold they are.

The room should be airy and light, which will enhance the mood of the participants. If possible, it should have enough empty space on the walls or windows to post up ideas as they are being generated.



Make sure you have plenty of writing surfaces and writing implements. Whether it be sticky note pads, note cards, pieces of paper, writing tablets, pens, easels, easel pads, or markers, you need to have enough in order to allow the spark of creativity find expression. If you don't, you may find your session quickly losing energy.

If possible, make sure there is plenty of natural light. This energizes people and makes them feel less boxed in. It can be augmented with artificial light.

The Right Thought Stimulators

Have you ever gone to a training class and seen little toys and puzzles on the tables in front of you? The theory behind that is that these little toys allow the mind to be creative. These thought stimulators can take different forms:



- Little toys that participants can play with so they can have a sense of 'play' in the brainstorming. Check out stores like [Oriental Trading Company](#) for inexpensive items.

- Picture puzzles or word play at the beginning of the session to get everyone's mind off of the humdrum or mundane.
- Pictures of old television stars, places, cartoon characters, or other pop culture icons. You can make it a contest as to who can answer first to establish a sense of play in the group.

The Right People



We all know that person – the person who has the innate ability to suck all the energy out of the room just by entering it. We may know the person who has to have the floor to themselves always and only. We also know the person who has to have the right opinion and has the power to enforce that. There are all examples of people who, if you can, you do not want in your brainstorming session. Here are the personality types you do want in that session.

You want a person who is:

- Willing to be silly. The person has to be able to make fun of themselves and ideas in order to brainstorm. They have to be willing to think and vocalize outrageous ideas, even if they know they don't have a chance of being implemented. Silly ideas sometimes hold nuggets of truth to other, less silly, solutions.
- Open to all ideas. The phrase, "that's dumb", or phrases like it cannot be uttered in a brainstorming session, or the energy of the room is diminished. The participants have to let all ideas float out in the session and respect every idea and every person in the room. If someone can't keep their opinions to themselves, they are probably not the best choice for a brainstorming session.
- Open to all levels of an organization. When a person steps through the door to that session, the position they hold in a company disappears. If that person makes the session level-conscious, then otherwise good ideas may never be said because someone does not want to disagree with 'the boss'. Additionally, you don't want someone in there who will only agree with the boss.

Your session should be open, spontaneous, and fun. Getting the right people in there will help. However, what happens if you have to invite someone who you know will have a detrimental effect on the group? Setting up ground rules and consequences should help. We'll discuss this later.

The Right Questions



Your questions need to provoke not only thought, but also imagery. They have to appeal to the emotion of the person and not just the logical, reasoning side. Think of it in terms of saying, "Wouldn't it be great if..." or "Imagine if you had the perfect process to get this done. What would it look like?"

Take some time to think of your questions that you are going to ask the group. They should be:

- Open ended. Your questions shouldn't be the option of a 'yes' or 'no' answer.
- Designed with the goal of your brainstorming in mind, but not designed to lead your brainstorming group to any specific answer or path.
- Allowing for greater drilling. The question should only start the conversation, not end it. It should allow for deeper exploration by the person.

- Should allow for free exploration. The question isn't about what is currently the process, but what could be the process, for example. If you find someone constantly trying to pull the group into the present, push the person into the future.
- Appeal to the emotional. If the person was able to make a wish, what would it be? If they could design the perfect car, what would it have? Pushing them into the realm of what if and not giving them boundaries will provide a great forum for idea generation.

3: Setting Your Expectations



Setting expectations for a forum that is supposed to have free-flowing ideas sounds like a contradiction, but it is actually an aide to brainstorming. By setting your expectations up front, you let your participants know what you want done. You can then point to these when someone starts straying outside the lines. Here are the expectations that I would recommend, taking from the book [Quick Brainstorming Activities for Busy Managers](#):

- Focus on Quantity
- No Judgments or Critiques
- Wild Ideas are Encouraged
- Create New Ideas From Those Already Given

These cannot be stressed enough. Repeat them early and often to participants, and bring them up in the session if someone is violating the rules. Engage the group early on to decide jointly what kind of 'punishment' violators will get if they don't follow the rules.

Try to not go overboard on the rules. For this to be a free-flowing session, you need to have loose boundaries.

4: Homework



Okay, now you've gotten the stage set for a fantastic brainstorming session. In next week's session, we'll talk about how to conduct the session so you can generate the ideas, keep the energy up, and keep the participant's interest level high. Now, for the homework.

Think of an issue either in your work or personal life that could benefit from brainstorming. Build a brainstorming plan to deal with it. You should include all the major areas discussed in this lesson, including place, people, stimulators, and questions.

In the bulletin board for the class, you'll find a section called X. In that section, tell your fellow classmates about:

- The place you will hold the brainstorming session (if you have a specific place in mind, tell us about it)
- The type of people you will invite to this (knowledge, skills, attributes)
- What you are going to do to stimulate brainstorming thoughts
- A general idea of the question you are going to ask

Please have this on the bulletin board by (date).

See you next week!

