BRAINSTORMING

/ Free-flowing creativity for problem-solving /

WHAT IS BRAINSTORMING?

Brainstorming is a quick and easy way to generate novel ideas for problem solving and innovation. As the name suggests, Brainstorming is meant to stimulate or excite the brain into thinking about issues in a new way. It encourages people to arrest conventional, logical thinking and embrace spontaneity, originality, and imagination

Responding to a single, specific problem or question, participants in a Brainstorming session express their suggestions or ideas quickly and spontaneously, without much processed thought or reflection. Free association and building on the ideas of others are encouraged; criticism and censorship are forbidden. The focus is on quantity rather than quality, the goal being to generate as many ideas as possible in a short time. The assumption is that the greater the number of ideas generated, the greater the chance of producing a novel and effective solution.

Alternative Brainstorming methods (see below under Variations) allow facilitators to change the approach when needed.

REQUIREMENTS:

- *Facilitator*
- *Rapporteur (optional for groups up to 10; required for larger groups)*
- *Plenty of cards (10 x 20 cm/ 4 x 8 inch) or post-it notes of different colours, and marker pens, (for recording and clustering ideas)*
- *Flipchart or laptop & projector (for displaying the Brainstorming question)*
- *Flipchart paper (placed on walls/boards) or pin boards, for putting up post-its/cards*
- *Coloured dots/stickers (optional, for ranking exercise)*
- *Meeting space (e.g., isolated room, park, garden)*
- *5 - 15 participants (per facilitator; see 'Brainstorming in larger groups' under Variations)*
- *20 - 30 minutes minimum*

WHEN AND WHY TO USE

Brainstorming is a group method enabling participants to look at a problem or question creatively. When correctly applied, Brainstorming temporarily halts the critical processes that would ordinarily snuff out potentially useful ideas before they could surface.

This is useful for:
▲ **Problem solving**, when fresh insight is needed.
▲ **Innovation**, when starting a campaign/ project, or enlisting external support.
▲ **Discovering diverse solutions**, when a problem has many facets.

Brainstorming requires only a little preparation and minimal equipment. It is versatile and can be applied in a variety of ways:

▲ **Standalone Brainstorming**. To help overcome a problem or challenge, you can invite participants from existing team, or from several teams, to offer their suggestions. Once you have gathered ideas through Brainstorming, these can be clustered, refined, prioritized and applied as needed; the original Brainstorming participants may or may not be involved in the later processes.

▲ **Brainstorming during a multi-session workshop**. Brainstorming is effective when used early during a workshop to generate ideas that can be culled and refined in later workshop sessions. This helps involve participants in shaping the course of the workshop, and thus creates a sense of ownership and commitment. Brainstorming can also be used later during a workshop, to collect ideas that the workshop may have inspired in participants and define next steps in a project/ initiative.
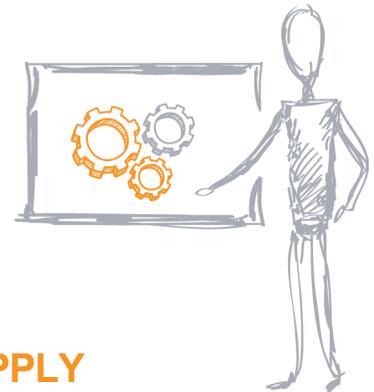
HOW TO APPLY

Prepare in advance

1. **Define the question or problem for brainstorming,** ensuring that it is appropriately challenging, provocative and relevant for the participants. Write it down in a brief statement. A good question is indispensable for a good session. Refer to the 'Tips for success' below for guidance on formulating questions.

2. **Arrange the venue – if possible, an unconventional one,** such as a garden/ park space (for groups below 10), a room away from your normal working location, or a meeting room that is quiet and away from the scrutiny of others.

3. **Inform/invite participants.** Aim for diversity and include both experts and novices, to benefit from the broadest possible range of creative perspectives.

. . . .

When you are ready to start

4. **Start with a short icebreaking or inspirational exercise**. Shake them out of their comfort zone and get them into the mindset that believes in new possibilities. (See the two suggested exercises in 'Tips for success' below.)

. . . .

5. **Instruct participants on how the session will be conducted:**

▲ All ideas are valid. Big or small, as wild or as illogical as they may seem, there are no bad ideas during a brainstorm. Wild ideas can give rise to creative leaps. Freeing participants to consider wacky ideas encourages them to think about what they really want without the constraints of technology or materials.

▲ The session will start with solo reflection and writing of ideas in response to the question, and then the discussion will be opened up to all.

▲ During open discussion, Ideas should be expressed as quickly as they arise, without censoring one's own thoughts.

▲ Piggybacking – modifying or expanding on others' ideas – is encouraged-. In conversation, encourage participants to use 'and' (which adds to others' suggestions) instead of 'but' (which contradicts).

▲ One conversation at a time.

▲ No criticism or judgement of any ideas during the brainstorming. (This takes place only at the end, during the clustering and ranking exercises).

▲ All distractions should be minimized, hence no use of laptops, mobile phones, etc.

. . . .

6. **Introduce the problem statement or question.** Show it on a flipchart or projector. (If it is long, have it written out before the session.) Keep the question visible throughout the session, and keep the session focused on it; sessions that try to address multiple questions can be confusing and inefficient

. . . .

7. **Start with individual reflection and response.** (This step is helpful for ensuring participation from quieter people who may not speak up in groups.) Ensure everyone has 3 -4 post-its or cards and pens. Give participants a couple of minutes to write their ideas and responses, one per post-it/card.

. . . .

8. **Collect and read out all the written responses, going through them quickly (to set the tone for the rest of the session) and post/pin them up.**

. . . .

9. **Next, ask participants to speak up with the first thoughts that come to mind.** Prompt them to speak quickly, even loudly, without thinking too much, to help foster a sense of creative urgency and disorder. Keep participants energized about sharing their ideas: Validate their contributions, and encourage them to come up with even wilder ones – remember, no one is allowed to criticize or

judge ideas during the Brainstorm. The process should be exciting and fast-paced.

10. **Record all ideas as they are shared.**
Get participants to use post-its or cards for writing down ideas, to allow for easier clustering and processing of ideas. If the group is larger than about 10 people, it is very helpful to have a rapporteur, but otherwise the facilitator is responsible for note-taking even while facilitating.

11. **Once there is a lull in the flow of ideas, wait a minute or two longer to check for any final thoughts – then consider stopping.** In a Brainstorm, ideas should fly off-the-cuff without too much thought or control. Once the flow of ideas has ebbed, typically after 15 - 20 minutes, conclude this part of the activity and move on.

12. **Cluster and process the ideas.**
Brainstorming works best if an immediate clustering/ranking session is incorporated. (Otherwise participants could succumb to the 'so what?' factor as their ideas disappear into a black hole.

⬥ Create clusters of ideas that are similar or overlapping, by taking inputs from the group and moving the post-its/cards into relevant clusters. You can also cluster the ideas by theme or by other pre-determined categories.

⬥ (Optional) Participatory ranking: Give each participant two coloured sticky dots and invite them to mark their two favourite ideas. Record the rankings with numbers.

⬥ Capture all the idea clusters and rankings. Photos taken with a smartphone are a convenient way to do this.

Follow up after the event

13. **Take forward the outputs of the Brainstorming session.** Ideas or idea clusters can be processed further in subsequent workshop sessions, by applying critical valuation, planning, prioritization, estimation of resource requirements and other project planning methods, or they can be assessed and applied by the project/ initiative team. **Report back to participants on what has been done with their ideas.**

TIPS FOR SUCCESS

⬥ Questions are the 'soul' of Brainstorming. A few relevant tips:

A good Brainstorming question is neither too narrow nor too broad. If it is too narrow or precise, it may fail to inspire expansive thinking. If it is too broad or vague, it will tend to encourage lacklustre solutions. Try to strike a correct balance.

Combine the question with an explanation of what we are trying to achieve when solving the problem or challenge, e.g. 'We are seeking to implement a community-based approach to sanitation. What are the key messages that will be most effective and powerful for our social mobilization campaign?'

Formulate questions in a positive way – i.e. instead of asking 'Why can't we succeed in …' or 'What shouldn't we do…', ask 'How could we successfully…' or 'What should we do…'.

Avoid questions that can be answered with a 'no', a 'yes' or a short, simple answer.

Important: Test questions beforehand with a couple of colleagues, to check whether the answers correspond to what you are looking for.

◢ Try to hold the session outside the usual office setting. This signals that the Brainstorming session will be different, and fosters a shift in mindset towards greater openness to new ideas, at least for the duration of the session. If the session can only be conducted in an ordinary meeting room due to time or space constraints, look for one that is private and out of others' earshot.

◢ If possible, include participants from various organizational units outside the immediate team. Outsiders will bring cognitive diversity in the form of different experiences and knowledge, and they are more likely to look at your problem differently.

◢ As facilitator, you will need to ensure that the group does not sink into analysis – a little is ok to build on previous ideas, but if conversation is veering too much towards implementation, move on.

◢ If using a rapporteur, it is essential that

they record the ideas using words as close as possible to the original speaker's, and even check back with the speaker to ensure fidelity to what they wanted to say. Avoid re-phrasing.

◢ Before beginning the clustering exercise at the end of Brainstorming, try to arrange for a short break. This will give participants a chance to shift gears, and will give you time for a head-start on identifying patterns/potential groups to kick-start the subsequent clustering process.

◢ Don't neglect reporting back to participants after the session on what happened with their ideas. Not doing so can limit enthusiasm and creativity for subsequent Brainstorms.

◢ Optional: If desired, consult with the project team before the Brainstorm to develop pre-determined criteria, specific to the problem or challenge faced, for helping to cluster the ideas that will be developed by participants.

◢ Start the brainstorm session with a simple icebreaker exercise to get people comfortable with sharing seemingly illogical, wild ideas – which will help open the door to innovation. Here are two such exercises.

Clearing Cobwebs (5 – 10 minutes):

1. Show participants a random inanimate object (e.g., paperclip, scissors, paper cup), and ask them to come up with ideas on what it could be used for. Participants can suggest any purpose for the object **except** what it was originally designed for. Encourage them to suspend

critical thinking and be as outrageous with their responses as they can.

2. Spend about 3 -5 minutes on this, recording the ideas as they come up. Then spend another few minutes reviewing these ideas with the group to show them the results of their own creativity.

Nonsense Debate (15 – 20 minutes):

1. Ask participants to suggest a few ridiculous proposals regarding everyday life, for example: "Chopsticks should be used for all meals" or "Everyone should eat ice cream every day". If the group is too serious to come up with sufficiently ridiculous ideas, create a few of your own. Write all the proposals on a flipchart.

2. Pick one proposal by group vote.

3. Write 'yes' on one card and 'no' on another. Raise one of the cards: if it is 'yes', then all participants should argue in favour of the proposal, and if 'no', they should attempt to refute it. Solicit their ideas, moving quickly around the room to include many voices – and then switch the card and have participants take the opposite side of the argument. Enjoy the exercising of the minds!

VARIATIONS

◢ **Silent Brainstorming:** Use this to keep a few dominant voices from controlling the conversation, or use it when a sensitive question is being brainstormed. Conduct the entire session with
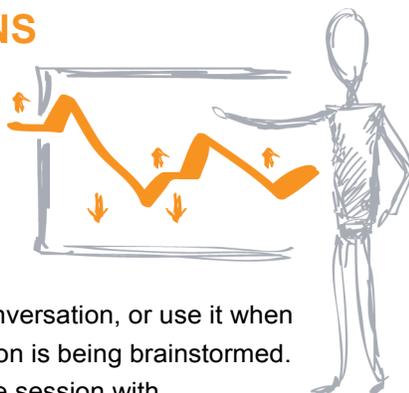
participants writing on cards. Give everyone pens and 3 – 4 post-its/cards of the same colour to ensure uniformity. Collect one round of ideas, read them out, then issue fresh post-its/cards and do another round. You can continue until the ideas run out.

◢ **Brain Writing (also known as the Group Passing Technique:** This is useful for eliciting large numbers of ideas from small groups of around 4 - 8 people. Each person starts with a sheet of paper (A4) on which the problem statement is written and writes one idea. All participants then pass their papers to the left and receive a paper (with one new idea already added) from the person on their right. After reading the idea contributed by the person on their right, each participant then either adds a second new idea, or fleshes out the first idea. The cycle is repeated until contributions begin to flag. The output consists of several lists of ideas that can be refined and expanded using other methods.

◢ **Topsy Turvy/ Reverse Brainstorming:** Determine the objective of your brainstorming, then start with a question on how to do the exact opposite; normally this will be a 'negative' question on how to wreck a process or fail to achieve a goal. Elicit unbridled and negative ideas from your participants for a time – then flip the process around and turn each negative idea, with the help of your participants, into a positive step. See the module on 'Topsy Turvy' in this Toolbox for more details.

◢ **Brainstorming in larger groups (1):** Larger groups (15 - 30 participants) can make for dynamic brainstorming sessions. Ideas will flow more rapidly, but you will likely need at least two facilitators to manage the process. The facilitators work as a unit, with a prepared script. They complement each other when dealing with participants, giving instructions, answering queries and ensuring all responses are captured by the rapporteur(s).

◢ **Brainstorming in larger groups (2):** Alternatively, consider dividing a large group into two smaller groups, with each group to brainstorm the same problem or question. Reunite the groups for a short concluding session to compare their outputs.

◢ **Autumn Leaves:** This method is well-suited for use in parks, gardens or other outdoor spaces. After the problem statement or question is introduced, invite participants to walk around with a stack of cards and write out their ideas, one idea per card. As the cards are filled out, they are deposited in a designated spot on the ground/ bench – a box can come in handy – so that others can pick them up, read them and perhaps gain inspiration for further ideas of their own. Once your participants run out of ideas, the cards can be processed by clustering and prioritized for further action.

◢ **Team Idea Mapping:** This method of brainstorming works by the method of association. It may improve collaboration and increase the quantity of ideas, and is designed so that all attendees participate and no ideas are rejected. The process begins with a well-defined topic. Each participant brainstorms individually, then all the ideas are merged and consolidated onto one large idea map. During the consolidation phase, participants may discover a common understanding of the issues as they share the meanings behind their ideas. It is OK to share additional new ideas during consolidation, and they are added to the map as well. Once all the ideas are captured, the group can prioritize and/or take action.

◢ **Question brainstorming (also known as Star-Bursting):** This process involves introducing a new idea or proposal, and then brainstorming the questions that need to be answered. Participants come up with the questions, which are briefly answered by the originators/proposers. Then another round of questions takes place, inspired at least partly by the first set of answers. This method is good for getting participation from everyone, since asking questions is often easier for quiet people than is proposing ideas in a group. The answers to the brainstormed questions form the framework for constructing future action plans.

◢ **Nominal Group Technique:** This is an advanced technique that builds on Silent Brainstorming. Participants write their ideas individually, in silence, for about 5-10 minutes. Then the ideas are shared in round-robin format: The facilitator calls on participants to share one idea each, in turn, and records the ideas on a flipchart. Once all the ideas are recorded, there can be a second round of idea writing and round-robin sharing. Next there is a group discussion: Participants can ask for more details, answer questions about ideas, or give further suggestions. Finally, the group ranks the ideas by voting (a process called distillation). The vote can be as simple as a show of hands in favor of a given idea. After distillation, the top ranked ideas may be sent back to the group or to subgroups for further brainstorming. Sometimes ideas that were previously dropped may be brought forward again once the group has re-evaluated the ideas. A trained and experienced facilitator is required. The participants should be primed and encouraged to embrace the process. Like all team efforts, it may take a few practice sessions to train the team in the method before tackling the important ideas.

REFERENCES

IDEO, IDE, Heifer International, ICRW. Human-Centered Design Toolkit. 2009 (2nd Edition).
http://www.designkit.org/resources/1/

Salas, Maria A., Herman J. Tillmann, Neill Mckee, and Nuzhat Shahzadi (UNICEF Bangladesh). Visualisation in Participatory Programmes. Penang: Southbound, 2007.

Swiss Agency for Development and Cooperation (SDC). Knowledge Management Toolkit. Bern, 2013 (2nd Edition).

CREDITS

Author: Meena Arivananthan.
Editor: Eric Mullerbeck.
Executive Editor: Ian Thorpe.
Expert review panel: Kerry Albright, Paula Bulancea, Neha Kapil, Lina Salazar, Edgar Tan.
Design: Olga Oleszczuk.
Production: Edwin Ramirez.

September 2015.