

## **LESSON 9: Brainstorming**

One of the most important skills that can fuel success in any endeavor is to come up with new and creative ideas. The best ones are those that solve problems or make our lives easier. While taking action is extremely important, without good ideas, those actions are ultimately good for nothing.

While each one of us is capable of generating ideas, oftentimes, we need some random inspiration to come up with one. But it is possible to effectively come up with ideas on a more consistent basis by recreating the conditions in which the greatest ideas can arise.

This activity will explore brainstorming techniques that will help you generate ideas. Remember that the purpose of brainstorming is to come up with as many ideas as possible. The more ideas that you come up with, the more choices are available when you are ready to build your models or prototypes.

### **Activity #1 - Do the post it! Post-it showdown!**

Materials: post-it notes, permanent markers, and a board (or wall space)

Procedure:

(Note: As with all brainstorming techniques, the idea is to create an environment in which there is no judgment. This means that when there is a new idea presented, participants are not allowed to discredit or turn down the idea. Building upon ideas is encouraged. Create as many ideas as possible within a short amount of time. The crazier the idea, the better.)

Step 1: Gather all students into a circular arrangement.

Step 2: Equip each student with a permanent marker and a pile of post-it notes.

Step 3: Explain the goal of the brainstorm: Come up with ideas for \_\_\_\_\_.

Step 4: Encourage students to draw their ideas out as opposed to writing

Step 5: Start the timer. Sessions are usually held to 10-15 minute intervals.

When a student comes up with an idea, they are to raise their post-it note and quickly explain their idea to the class. At this time, all students should stop drawing and pay attention to the new idea. Once the idea is presented, everyone goes back to drawing their ideas. This fast-paced brainstorming technique will yield many crazy ideas, and that is the purpose. It is then the teacher's job to encourage students to build on ideas and turn them into reality.

## Activity #2 - Do the Opposite

This is a very counterintuitive brainstorming technique that can often yield many new creative ideas. There are two ways to use it. First, we can reverse the entire problem and brainstorm on that. Or second, we can reverse one aspect of the problem and do the opposite of what everyone else is doing.

Step 1:

- Write the problem or challenge that you wish to solve
- Reverse the problem. Brainstorm ideas on how to cause the problem.
- Use these causes as a point of discussion for new ideas.

Example:

- *Problem: How can we make it **easier** to wake up in the morning?*
- *Reverse Problem: How can we make it **harder** to get to wake up in the morning?*

Step 2:

- State the detail for which we will brainstorm
- List what others are doing (that makes it harder for them to wake up in the morning)
- Brainstorm ways to do the complete opposite

Example:

- Detail: *The way to turn off an alarm clock.*
- Others: *Alarm clocks usually require the user to push down on the alarm clock to turn off the alarm sound.*
- Brainstorm: *Create an alarm clock that requires user to pull a handle. This forces the user to use both hands, thus increasing the chances of sustaining their wakefulness state.*

(Note: Using both of these methods can help you come up with ideas that are creative, innovative, and unexpected. It also forces you to challenge set assumptions about the way the world works, which is key in developing innovations down the line.)

## Activity #3 - Brainstorming by yourself

- Draw or doodle while you're thinking.
- Use mind maps or thinking maps.
- Ask questions.
- Read.
- Take a walk with a notepad and a pen.

- Observe. Look around. Write down interesting things that you see, hear, feel, smell or taste.

**Answer the following After-A-Brainstorming-Session Questions:**

- Has a solution like this been done before?
- What resources do we have?
- What resources might we need?
- How will this affect our competitive position?
- Who's accountable for this project's success?
- What will be our roles in this project?
- What structures do we need to have in place?
- What skills are required to do this project?
- Who needs to know how to do what?
- What will this project cost?

(Note: you can add more questions for discussion. The intent is to clarify roles, criteria and requirements to come up with a solution to the problem or need.)