

## BRAINWRITING/BRAINSTORMING

### PARADIGM SHIFTING TECHNIQUES

Try one or more of these methods to get things going if the brainstorming or brainwriting session is starting to slow down.

**Constraint Relaxation:** Relax one of the constraints. What if there were no cost limit? What if it could be as heavy as you wanted? What if you could use a material which doesn't exist yet. What if gravity didn't exist? What if you could travel faster than light?

**Scale:** Think of the same problem on a different scale. What if instead of lifting a boat you were lifting an ant...or vice-versa. What if the product had to be 10 times smaller....or 100 times bigger. What if it had to cost 25 cents rather than \$100.

**Opposites:** Brainstorm on an opposite problem. Turn the problem inside out or upside down or change the order. What if you were trying to drop rather than lift? What if you were trying to set a fire rather than put it out? What if customers served food to waiters in restaurants? What if you drove before you started your car?

**Provocation and Movement:** Throw out a completely absurd "provocation" related to the problem (e.g. "Cars have square wheels", or "Every house has 100 phones"). Brainstorm and try to extract principles or focus on the differences to help you move towards useful ideas. This is a very powerful method and every facilitator should learn how to apply it.

**Create a "Pain Point" or ideal situation:** Add a condition that really makes the design a challenge. For example "Students must be able to carry 10 textbooks comfortably in this new backpack". Prompts that hint at over-crowding and over use are also good. An example of the reverse, an ideal situation, would be something like "all books are electronic and students will clean out backpacks every day!" Not realistic but it changes the design paradigm.