

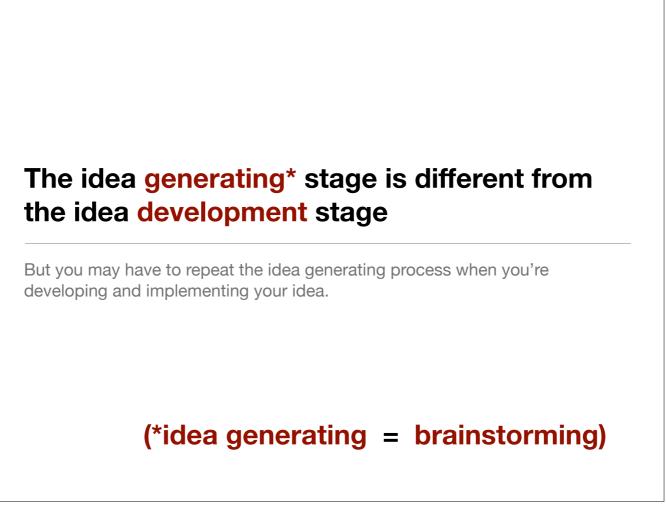
Strategies for getting ideas, getting more ideas and better ideas

Creativity 101 Elizabeth Ingraham eingraham2@unl.edu http://www.mappingnebraska.com All Rights Reserved

This presentation is about strategies for getting ideas, getting more ideas and getting better ideas.



To be creative you have to get an idea, develop the idea, and communicate the idea (in some physical form). And this applies whether you're brainstorming on your own or in a group.



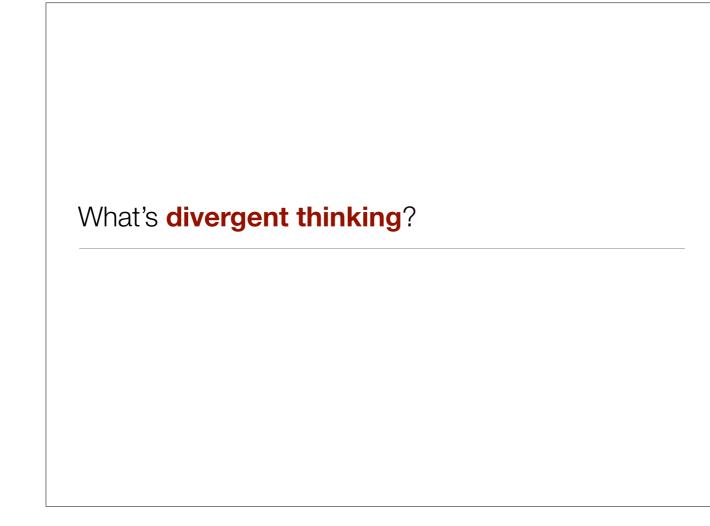
So, idea generating is brainstorming and it's different from developing an idea. But, you may hit a snag when you're developing or implementing your idea so you may have to brainstorm again to generate another (sub) idea. So brainstorming can occur at any stage of project, not just the initial stage.

\\/bc	t io op id			
	it is an ide			
	a may be sma a may be a mi			
A new	idea may be a	synthesis of ex	isting ideas.	

What is an idea? Ideas can be big. Or little. And big things can come from little ideas. And big things can come from mistakes. Teflon and Post-it notes are two examples (more on that when we talk about failure). And ideas can be a synthesis of things that already exist. Suitcases didn't ALWAYS have wheels.

How do I get an idea? Use divergent thinking. Suspend judgment. Capture all possibilities.				
Suspend judgment.	How do I get an ic	lea?		
	Use divergent thinking.			
Capture all possibilities.	Suspend judgment.			
	Capture all possibilities.			
	Capture all possibilities.			

How do you get an idea? Generating ideas is simple: - Use divergent thinking - suspend judgement - capture-record or write down-all possibilities. Writing is preferable because you have a way to instantly and visually make non-linear connections between ideas by drawing lines and circles and arrows



What's divergent thinking?



Divergent thinking ranges widely and looks for many possible solutions. You start at the wrong end of a project by starting with the SOLUTION but instead start with the INVESTIGATION. You look at the problem from more than one viewpoint, generate multiple approaches and are NOT concerned (yet) with feasibility or practicality. You can NOT have creative approaches or creative ideas without divergent thinking!

Divergent thinking is also known as lateral thinking

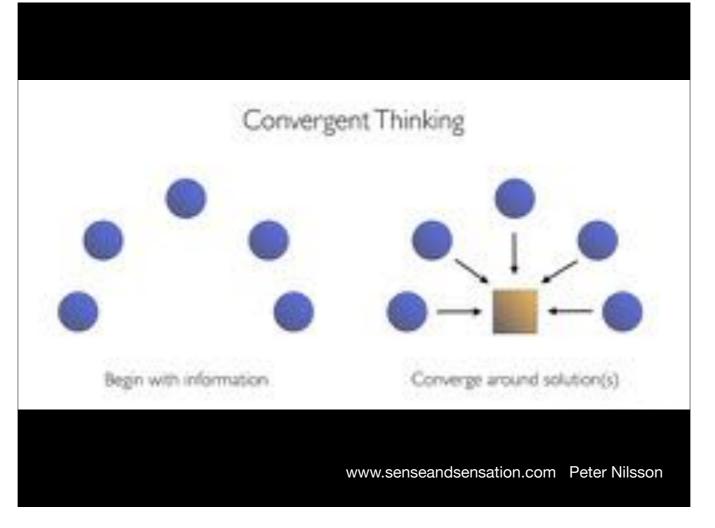
Logic is the tool that is used to dig holes deeper and bigger, to make them altogether bigger holes. But if the hole is in the wrong place, then no amount of improvement is going to put it in the right place. No mater how obvious this may seem to every digger, it is still easier to go on digging in the same place than to start all over again in a new place. **Vertical thinking is digging the same hole deeper; lateral thinking is trying again elsewhere.**

-Edward de Bono

Divergent thinking is also known as lateral thinking. I like de Bono's approach (he's a creativity expert) because he helps us understand that even though it's easier to just keep drilling down in the same place, that isn't going to lead to discoveries of value. We need to dig a lot of holes to strike oil and we need to range broadly.

What's convergent thinking?

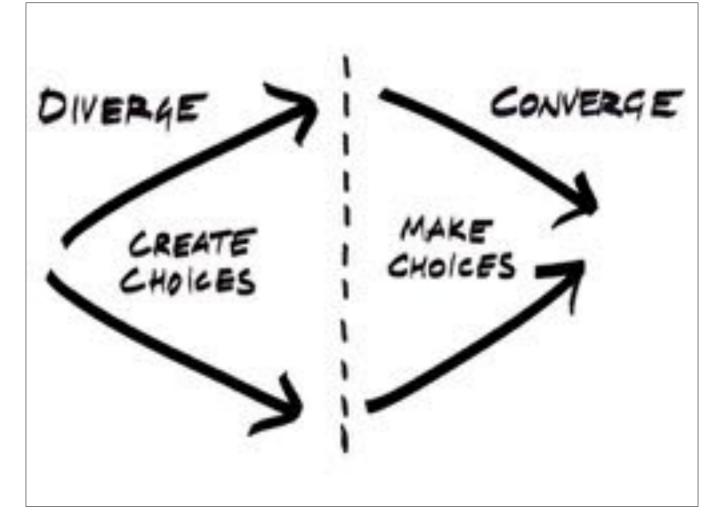
What's convergent thinking?



CONVERGENT thinking means we are looking for an answer—the single, correct (or most correct) solution to a problem. We use logic and our knowledge to find a conventional or orthodox solution and then stop. This approach works great on a math test or when doing your taxes but DOESN'T work when problems are complex, ambiguous or ill-defined—And those are most of the problems we are called upon to solve in today's workplace—or when we are doing CREATIVE research.

Convergent thinking DOES have its place

BUT, divergent and convergent thinking are both useful and both have a role to play. Divergent thinking is an essential component of creativity but it's NOT synonymous with creativity.



A creative approach uses divergent thinking to generate a lot of possible approaches and THEN uses convergent thinking and logic and analysis to help select the best solution for our problem and to develop, refine and debug that solution. So you can start to see how the ability to reframe and to be flexible in your thinking is so important.

10 Strategies to help you get an idea

So here are 10 strategies to help you get an idea

#1 Do a mind dump: write every association. Every one. Write EVERYTHING down!

An unordered list. Similar to a mind map, but even more unstructured.

If you're stuck, write with your non-dominant hand!

Set a timer if you're resistant.

Do a mind dump. A mind dump is just an unordered list. There's no hierarchy, order, logic and you DON'T have to make sense. Just write down every association you have with the problem. EVERY ONE. DON'T skip this step! It's a way to get what's in HERE (the background noise of your mind) out THERE, on paper, where you can look at it and find connections. You always know more about a subject than you (consciously) think you know. And it's not linear, so it lets your right brain speak but at the same time, it's a list so it satisfies your left brain. Win-win. If you're drawing a blank, there are easy ways to get unstuck. One is to write with your dominant hand. This will totally frustrate the logical part of your mind which will give up and allow your unconscious to speak. Or, set a timer, which will pacify your critical mind which will tell itself that "This is stupid but I just have to do it for 20 minutes."This works for ANY distasteful or frightening task, by the way.

which I Late, Steve, Madden, Suche Dress, Blue Sudde Crats. 3 Hillon, Brittney Spears, Avia lacket Dogs, Mi streets, cross walks Litch hiking Brace Will Hosh Puppies, Barry Head Slippors, K-Juijss 5.0605 Gill, the North Face, Tribera, Trotters Faurset Suzuker ASSENNE BAR. clashing in cases, stepping in batg Pengain , V DAFley Bh sleep, Hat Wheels, Osh Kosh B'gosh, et; Indellers Hu to occer socks, 3. ., preshool, light ups, neitemakers, Bionicle, 10 entshoelaces, trend, rodies, 1000. ip the pu playly after they and A BRO FURIT

Here is just part of a mind dump, on a huge sheet of paper, with a student's associations around "shoes" for project to design a pair of shoes that alters the way you contact the ground. One of the powerful things about a written mind dump is that it's a physical action, and ANY physical action can help disarm and overcome your resistance.

d gell gellation betweening pay the baller, the pares plate, sign whe makes, they adde the make the line wate a المتحد المحاج ومعهدان مند ومحمدة عودة المحمد ومحاج ومحاجز ومحمد والمحاج والمحاج ومعالية مطلبو وحويا بالمعود وال where moving the hits applies over low and that protected, while that so that the answer they are high and, eller المعاد المراجعة والمراجعة والمراجعة والمعادية والمحادية والمحادية والمحادية والمحادية والمحادية والمحادية والمحادية what age in in land and shall be parter to be and the the the spectra the hear the hear of the hear while to grade to be where Fleibers have shall belog stor reverses. She and being starker for Att Shells, benef. All Tayl and Real the due that any Recent, many brought one Fature and and is an outer Marcalle Red and had been to be deduced and control about chander at announce chart, any or it along I have Special and Filly Plans, reacted, made in bracking or slipstaps and main trands and an strong the strong part of the strong have to some of wethin the difficher. The bases of Any his pain that the advantate but which by ing game, the paper that the willing about shore on the paint elaren est keleneran shar, takit ingalan site palane Hatpaning the the anguat dari tingabatala here it has a white a want bertalong i not contrary burghen it I want go ber but it the or i go that and i good the it's light have my half at her and particular that, is, more, had and, sending here, wants at her to be the made but two, the Sudd has - Elis Barly, line Simmers' phillete days, but ; Exceller Sti, 545, Tomor, Anda, Andat Dogo, Himpolically, Anderstone, Cliente Rights, Break J. Frank, Known and Reaction, Sources a beer stills, at he spice, so sin, down they's, But they, but y that, that Rever, I don't Kick, love, themat, por, K-Souto, Robil laws, Store, Higher, Sport, Ride High Robertsky, Secularity, monthally out have, Should read , Trades (ind to the file I dos, the dealers in list 42, bo has been been to be have must relating the relation how and sold share the south parts from the Carle Dian harder and the south the the a betylen - India, Augen, When House, Frankrins, Rover Rangers Trenage Hickor Hugh Tarking Box St. Earlier, Son al Equal, bedry healing at hereis pure, Andre, On hallon, Incan Sheed Burg Para, Containing the day Trank Comm all got reserved of Brinzle new deal boy strike 154, beat, Kely Chankie was from how aldered, of yes ngel af de Neglesting alles Magles Jeprins 2011, al real 2 wild 2 a Berlin wat spin prografiers, managerte 5 m. Al 2011, Al 2011, Al 2011

That's why the mind dump--whether you list, or map, or cluster--is so valuable. Mind dumps allow both sides of your brain to speak. They get everything that's "in there" out here, where you can examine it and look for patterns. They reveal what you know. Which is ALWAYS more than you think you know. And they reveal what you're interested in. Here's a portion, just a portion, of a mind dump on 18" by 24" paper around the concept of "shoes."

#2 Tell the critic to take a hike (and ban the censor and fire the perfectionist)

Tell the critic to take a hike



We all have an inner critic. This is the voice that says "This is stupid; this is a waste of time; this is a waste of money; you'll never be able to do this and you'll look foolish." Tell this inner critic: "Don't call me. I'll call you." The critic has NO ROLE at the beginning of your brainstorming process. Allow the critic to speak **after** you've generated several possibilities, to help you decide which to pursue; **after** you've made something, to help you see what's working and what needs work. **And ban the censor.** Your job when you're trying to get ideas is to entertain all possibilities. Nothing bad will happen by just THINKING about a possibility. NOTHING! So don't censor, don't limit, don't exclude and don't hold back. There will be plenty of time later on for that. (When you bring the critic back.) **And fire the perfectionist.** Perfection is unattainable in this world system. Perfectionism kills work, it doesn't create it. Excellence, on the other hand, is achievable with patience, effort, training, experience (and some luck).

#3 Get your best worst ideas (ungrammatical but liberating)

Now that the critic is gone, tell yourself you'll just write the WORST first draft or you'll just come up with 10 STUPID ideas. Generate the most bad ideas you can (ungrammatical but liberating). You'll inevitably fail because your first draft will be surprisingly good and some of your worst ideas will be promising and you will have generated momentum to carry you forward.



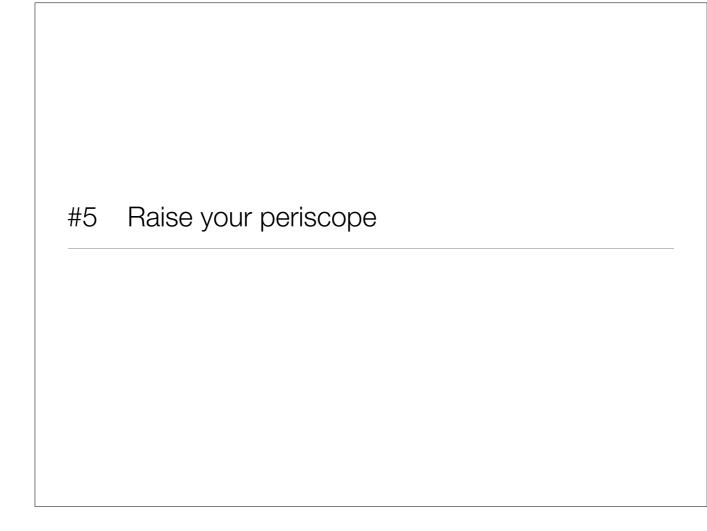
An interesting, but truly bad, idea.



Change your point of view! Reframe! Refocus!



USE your mental and psychological lenses: macro, telephoto, wide angle, night vision. Zoom out to see the whole; zoom in to solve a particular aspect. Take different physical points of view about the project and your possible solution and consider it from the viewpoint of different users. Dissect it, take it apart, turn it upside down, enter inside it. Imagine how your solution would look or feel.





Raise your periscope. (Surrounding!) Look around you for inspiration. Take a mind walk, either physically or digitally. Look at things or processes that already exist that are analogous in any way (similar visually or in function or in materials). Range as widely as possible. Cross the borders into other disciplines. Regard EVERYTHING as having a possible connection to your problem. Remember that SURROUNDING (looking at things and interacting with people in new ways and using all your senses) and BROADENING (acquiring more diverse information and more diverse skills, outside your current domains and outside your comfort zone.)

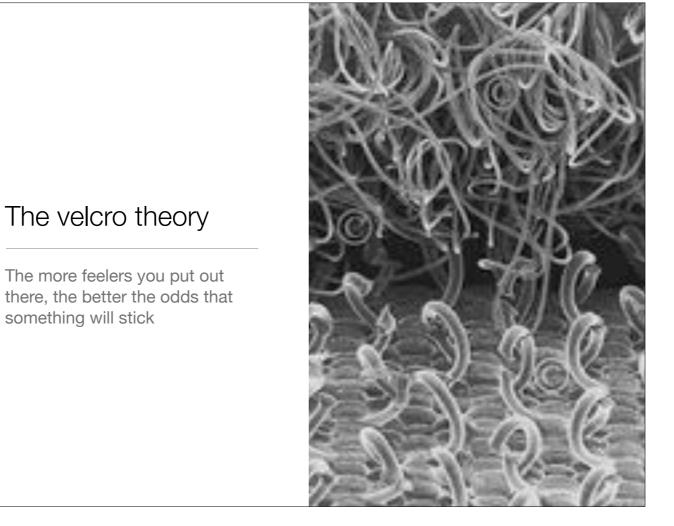
#6 Get the MOST bad ideas possible

Aim for quantity, not quality!

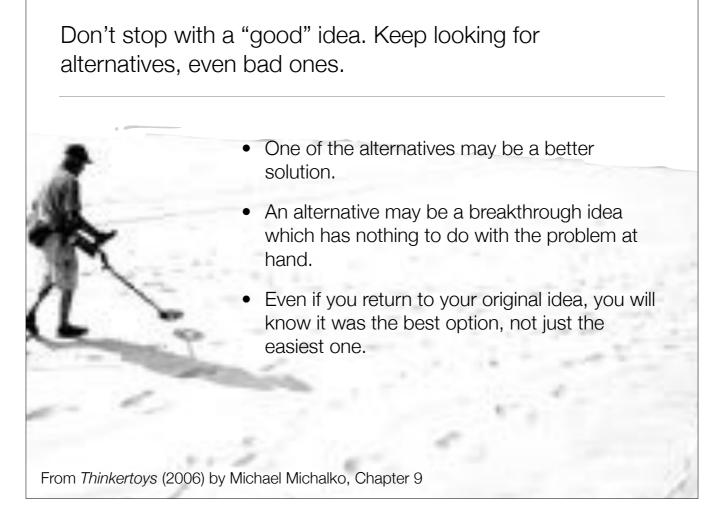
Get the most bad ideas. Don't just get bad ideas, get the MOST bad ideas possible. Aim for quantity, not quality! Going back to the car example, what are all the ways a dashboard could be designed to make driving safer, not more dangerous? All the ways. Should there be a steering joystick, not a steering wheel? Question every assumption. (Look at "Why you'll never drive your car with a joystick...and other lessons from a century of car cockpit research." <u>http://arstechnica.com/cars/2014/06/why-youll-never-drive-your-car-with-a-joystick/</u>)

Quantity will always—**always**—**ALWAYS** increase the quality of your ideas

Quantity will **always** increase the quality of your ideas. **Always!**

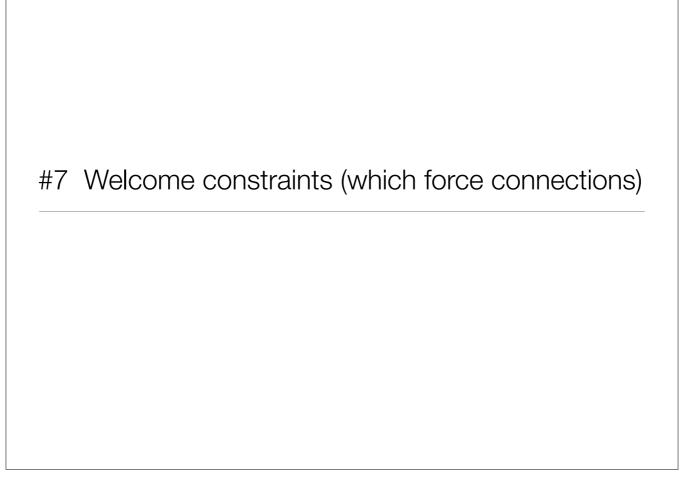


All you have to do to have better ideas is just to have more ideas. This is worth repeating: All you have to do to have better ideas is just to have more ideas. This is the velcro theory in action. The more feelers you put out there, the better the odds that something will stick.



Why look for alternatives? Why not stop at "a" solution? Especially when you're pretty sure you won't come up with a better idea? There are lots of reasons but here are three:

- An alternative may be a better solution
- An alternative may be a breakthrough idea which has nothing to do with the problem at hand and that is extremely valuable.
- Even if you return to your original idea, you will know it was the best option, not just the easiest one. You'll be more confident and have more success explaining your ideas to others.



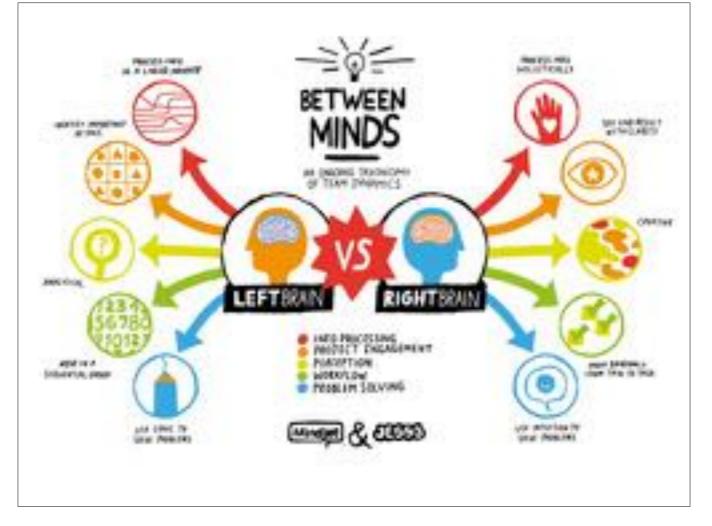
Welcome constraints (which force connections). We get frustrated when we're given problems which have a lot of constraints and may feel that our creativity is stifled. But, constraints can force us to look at familiar things in new ways, and thus be more creative, and constraints save us from the dreaded "option paralysis" when we can do so many things, we can't decide which thing to do.



Constraints DO encourage creativity. Constraints challenge us to try new things and use tools and resources in new ways, and CHALLENGING yourself in this way is one of the core competencies of creating thinking. Also, constraints force connections between things that seem unrelated but in fact share a connection that isn't visible on the surface. This way of thinking is especially useful when you (or you and your colleague) have two equally attractive and interesting ideas but must choose one to explore. Ask yourself how you could combine them. More often than not, your two competing ideas can be viewed as aspects of a third and more powerful idea.

#8 Be in your right mind (which may be your left brain)

Be in your right mind (which may be your left brain)



The relationship between our left brain and our right brain is a lot more complex than we thought in the 80's. But, categorizing **WAYS of thinking** and **learning PREFERENCES** as left brain or right brain is still a useful way of looking at two very different cognitive approaches or pathways and trying to develop the mental flexibility to use both of them at the appropriate stages of a project. **Divergent thinking is right brain thinking.** It looks at thinks holistically, uses intuition, uses all of the senses and loves visuals and visualizations. **Convergent thinking is left brain thinking.** It's more analytical and logical and looks at the situation in a linear and sequential manner. (The left brain views the train car by car, from ENGINE to caboose. The right brain sees the whole train at once.) The creative person uses both intuitive, divergent thinking to generate ideas, and logical, convergent thinking to evaluate ideas and to shape them into concrete form. Part of the flexibility and fluency of a creative person is the ability to switch back and forth at will from **generative** and **imaginative** thinking to **critical** and **evaluative** thinking.

Don't discount intuition

Intuition is the journey from A to Z without stopping at any other letter along the way. It is knowing without knowing why.

Curiosity is the way we answer when intuition whispers, "There's something there."

-Gavin DeBecker, Threat Assessment Expert



"The intuitive mind is a sacred gift and the rational mind is a faithful servant. We have created a society that honors the servant and has forgotten the gift."

- Albert Einstein

And don't discount intuition. Gavin DeBecker is a threat assessment expert for the CIA, the Vatican and various governments. He says intuition is a GIFT we all have, whereas retention of knowledge is a SKILL. Intuition ISN'T just a guess; it's a conclusion which we can't (yet) explain. Listening to our intuition can lead us to more effective and more powerful solutions. We need BOTH analysis AND intuition when we are creating.

#9 Don't push the river

Don't push the river.



It won't do any good and just wastes your energy. What this means in brainstorming is that you shouldn't try too hard or keep trying to force solutions when you've exhausted your supply of responses. All experts agree that the most effective problem solving requires a period of conscious effort FOLLOWED by a period of letting go and forgetting about the problem. What happens is that the period of conscious effort sets up a situation so that your unconscious CONTINUES to work the problem. (The closest thing I've found in the universe to a free lunch.) You're walking along and the answer, a possibility, drops out of the sky But REMEMBER, you need the conscious effort first!



And finally, assume there IS a solution. To solve a problem, it's much better to believe you already have the answer in your unconscious. ASSUME there's a solution (because there is) then work on how and where to look for it. Don't waste time getting caught up in "IS there a solution?"

The bottom line

Breathe. Relax. Let go. Allow. Don't be afraid to look, sound or feel ridiculous

The bottom line?



Breathe. Relax. Let go. Allow. Don't be afraid to look, sound or feel ridiculous. Treat it like a game. Challenge yourself to get the most worst ideas in the shortest time.

The best way to have a good idea is to have lots of them.

-Linus Pauling

All truly great ideas are conceived while walking.

-Friedrich Nietzsche