Lateral Thinking

What’s in it for me? Explore a classic text that will help you look at problem-solving and innovation in a new light.

When it comes to generating exciting ideas, the last thing you want is to get stuck in a rut. There may not be a formula for coming up with the next game-changing innovation. But once you learn the secrets of lateral thinking, you’ll have a powerful tool you can always rely on to spark new ideas. The key to lateral thinking is to look at old ideas in new ways – turn them upside-down, inside-out, and poke holes in them. With classic examples from Edward de Bono, the father of lateral thinking, and a little practice, anyone can learn to remold their thoughts into inventive new solutions. In these blinks, you’ll learn

how product design exercises can help you think outside the box; why you should never shut down someone’s “bad” suggestion; and how the use of a dictionary can help spur new ideas.

Lateral thinking helps the mind rethink and update its entrenched patterns.

There are two modes of thinking: vertical thinking and lateral thinking. For the most part, we’re used to vertical thinking. This is the kind of process that takes an idea, solidifies it, and backs it up with data and facts – almost like planting the idea firmly, and deeply, into the ground. If vertical thinking is like digging a hole to plant your idea, lateral thinking is about finding other places to start digging. The key message here is: Lateral thinking helps the mind rethink and update its entrenched patterns. To begin with, it should be noted that lateral thinking isn’t antithetical to vertical thinking – they’re not at odds with each other. Vertical thinking is necessary and useful because it aligns with how the mind works. Among other things, the mind is a powerful system for identifying patterns and organizing information. It does this through what’s known as a self-maximizing memory system. That is, we base our ideas on the experiences we remember, the patterns we’ve identified, and the evidence we’ve gleaned from them. This system works great for the most part. For example, we come to understand letters and numbers so well that even if they’re partly obscured, we can still recognize them. But it also has a downside. The more we experience, the more we become entrenched in these patterns and expectations. We take them for granted and are more than willing to just let them be. Lateral thinking is a way of challenging the patterns – of testing them, prodding them, and seeing if they can be updated or improved. Creative and innovative ideas are hard to come by if we don’t challenge the patterns and assumptions our mind is unconsciously making. This is why both vertical and lateral thinking are important. In subjects like science and math, it’s necessary to label and categorize things. And the brain is the perfect tool for doing this. But other times we need to purposely go against our systematic nature and rethink those categories and what’s in them. This is where lateral thinking comes into play.

With time and practice, anyone can

benefit from lateral thinking.

Some people may be intuitive lateral thinkers. For the rest of us, thinking laterally usually takes some practice – actively going against our deeply held beliefs and ideas isn't business as usual. So what we need are techniques and exercises that we can use to strengthen our lateral thinking muscles. The key message here is: With time and practice, anyone can benefit from lateral thinking. One of the most fundamental principles of lateral thinking is the understanding that there's more than one way to look at something. Think of the word "lateral" as moving to the side instead of looking at something in the conventional manner. Lateral thinking is about looking for alternatives, with the express intent of shaking up established patterns; then you either find new patterns or update the old ones. One of the simplest things you can do to help jumpstart lateral thinking is to set quotas. A lot of people will say they're open to new ideas and eager to pursue alternatives – but at the end of the day, good intentions have a way of falling short. This is where quotas can work well. When you set a firm quota of three to five different ideas, you're enforcing that good intention and making people engage with lateral thinking. With quotas in mind, one of the simplest ways to practice lateral thinking is to come up with descriptions. Here's an easy exercise: cut out photographs from newspapers or magazines, and remove any words and context surrounding them. Then ask people to come up with three different descriptions about what's happening in the photos. Certain images, like firefighters tending to a burning house, are not ideal for this exercise; try finding pictures that will lend themselves to multiple interpretations. For example, a picture of people wading in shallow water could be described as people escaping onto land from a shipwreck, people who've been caught in a flood, or people heading out to an island or an offshore ferryboat. Similarly, you could take a photo or painting and obscure half of it. Then ask people to describe what's happening in the hidden portion. In all lateral thinking exercises, it's important to stress that every response is valid. In fact, wildly imaginative and highly improbable scenarios can be hugely helpful in inspiring even more ideas and breakthroughs.

Lateral thinking requires reserving judgment and identifying dominant ideas.

Generally speaking, there are no wrong ideas in lateral thinking. Actually, "wrong" ideas can be the very things that lead to innovation. Guglielmo Marconi was only able to send wireless transmissions across an ocean after he toyed with the wrong idea that radio waves would follow the curvature of the earth. This is why lateral thinking sessions are judgment-free spaces. All ideas are welcome because you never know which one will lead to the big breakthrough. The key message here is: Lateral thinking requires reserving judgment and identifying dominant ideas. When trying to come up with ideas to test and move forward with, lateral thinking can include both a generative stage and a selective stage. It's during the generative stage that judgment must be withheld. One person's so-called bad idea may inspire another person to come up with the idea that causes everyone to rethink their way of doing things. Sometimes, testing an idea that may seem foolish will lead to a brilliant new idea entirely. But perhaps even more important is that people feel uninhibited in their thinking and free to speak their mind. You can encourage this uninhibited idea-sharing by getting people to respond to design

concepts. For instance, ask them to come up with ideas on how to make a better apple-picking machine. Or an unspillable drinking cup. Or see what people can come up with when you ask them to redesign an umbrella – or even the human body. This exercise leads to another important part of lateral thinking: identifying dominant ideas. Often, people will jump to conclusions and assume they know all there is to know about something like, say, picking apples. But what would the dominant ideas be in making a viable machine to pick apples for commercial purposes? Once again, people should be free to make suggestions without fear of judgment. Is picking the apples without damaging them the dominant idea? Is it finding the right apples to pick? Is it getting them to the ground and transporting them unharmed? Through this process, you may be able to identify different fractions – another useful component of lateral thinking. By breaking the problem down into parts, you can look at it from many more different angles.

Use the reversal method and analogies to switch up your thinking.

There's a good chance you've been part of a brainstorming session. But that doesn't necessarily mean you've been part of a good lateral thinking session. Still, brainstorming can be an effective way to sustain the principles of lateral thinking – when it follows the right guidelines, such as withholding judgment and exploring dominant ideas. For best results, the author recommends getting a group of around twelve people together for 30 minutes. Ideally, people will still be bubbling with ideas and enthusiasm by the end of the session. The key message here is: Use the reversal method and analogies to switch up your thinking. Along with descriptions and design challenges, problem-solving is another way of sparking the power of lateral thinking. Of course, brainstorming is a great way to get the ball rolling when tackling a problem, but there are a few other techniques that'll get people into a lateral-thinking frame of mind. One such technique is known as the reversal method. There are different ways of applying this method, but it can be as simple as literally reversing the conditions of the problem you're facing. For example, if you're dealing with an issue around "police officers directing traffic," think of the issue as "traffic directing policemen" – or maybe "police officers misdirecting traffic." Reversals like these are essentially provocations to get the mind considering other possibilities that it might otherwise miss. Sometimes a reversal can be absurd. Unlike a problem about traffic directors, a problem about street cleaners isn't as obviously reversible. Streets aren't going to clean the cleaner. And the idea of uncleaning a street won't get you very far. But really, it doesn't matter if the reverse is absurd or not. The point is to provoke lateral thinking – to look at situations in new ways. Analogies can serve a similar purpose. Take the statement, A rumor is like a snowball rolling down a hill. This makes sense since a rumor gets bigger and stronger the more it spreads. But if you look at the analogy from all angles, you might arrive at questions like, Is the snow the number of people who are exposed to the rumor – or the strength of the rumor itself? Both reversals and analogies are effective ways of helping you look at an issue from different, unconventional vantage points.

Attention areas and entry points can help you achieve unexpected insights.

In one of Sherlock Holmes's many mysteries, the detective and Dr. Watson were considering what evidence was relevant. There was a dog at the scene of the crime – but because the dog hadn't done anything, Watson considered it irrelevant. For Holmes, on the other hand, the fact that the dog hadn't reacted was precisely why it was relevant: it probably meant that the dog was familiar with the criminal. Like the dog that didn't do anything, in lateral thinking, what is commonly seen as irrelevant suddenly becomes relevant. You just need to know where – and how – to look. The key message here is: Attention areas and entry points can help you achieve unexpected insights. To see things in a different light, you want to look where others don't and approach the problem from new angles, right? Well, sometimes this means starting at the end. Imagine an illustrated puzzle in a children's book. Three fishermen are sitting in a boat with their three fishing lines all tangled up. At the bottom of the puzzle is a fish caught in one of the hooks. The question is, Which fisherman caught the fish? Usually, a child will trace each fishing line, one by one, starting from the top – until the right line is identified. Of course, the simpler entry point would be to start at the end, with the fish, and trace the line upward until you reached the lucky fisherman. Like with puzzles and mazes, sometimes starting from the endpoint can lead to happy results in lateral thinking. But, just as your brain naturally creates and holds on to certain patterns, it also wants to pay attention to the most obvious areas and approach things in a linear fashion. This is what lateral thinking aims to disrupt. Instead, the goal is to approach situations from surprising points – and pay attention to what is often overlooked. Here's one more example. Let's say you're scheduling a tennis tournament and there are 110 participants. How many matches do you need to schedule? The common approach is to pay attention to the winners in each round, who move on to play more matches. But the easier solution is to think of the losers. For there to be one winner, 109 players must lose. And because each player can only lose once, this means you need to schedule 109 matches. Most people ignore the losers. But in lateral thinking, paying attention to what other people have disregarded is precisely what'll make you win.

There are two ways of sparking random stimulation: exposure and formal generation.

So far, we've looked at descriptions, design, and problem-solving – as well as techniques for triggering lateral thinking around these situations. Many of these techniques involve provocations: simple ways of catalyzing lateral thought that can become second nature with time and practice. But there are also more random techniques that can be used to help – ones that don't necessarily have to be associated with descriptions, problem-solving, or design. And when we say random, we truly mean random. The key message here is: There are two ways of sparking random stimulation: exposure and formal generation. To find a good idea or achieve an inspirational breakthrough, sometimes you need to step into a new environment. One way is through a technique known as random exposure. This could involve reading a book that has nothing to do with your area of expertise, or even going to a convention associated with a completely different field from yours. This is often called cross disciplinary fertilization – and it can work wonders. The key is to not be looking for anything in particular; don't go in with an agenda. That kind of mindset is the complete opposite to lateral thinking. So go in with an open mind, and let inspiration strike! The other method, known as formal generation,

is equally random. You can play with formal generation in a number of ways, including opening the dictionary to random words and seeing how they interact with the problem at hand. This is a fun classroom exercise. Ask for a number between the first and last pages of the dictionary – and then another number between 1 and 20 in order to determine the sequential word listed on the page. Then write down the word and definition on the chalkboard. Let students consider how this word might help solve a problem, such as shoplifting, or how it could help design a better window. Another method is to look for random objects, like the nearest red object, and see how that interacts with the problem or challenge you're facing. As always, it's important to suspend judgment in these techniques and give even the seemingly absurd ideas their day in court. By paying attention to the unexpected, you could get an equally unexpected result that changes everything.

Final summary

The key message in these blinks is that: Lateral thinking is not opposed to vertical thinking. Rather, it's a way of testing and updating the conventional patterns and ideas that get established through vertical thinking. Given our natural tendencies to stick with long-held beliefs and assumptions, lateral thinking forces us to look at things from new angles and reconsider any entrenched ideas. Techniques centered around descriptions, design, and problem-solving can help kickstart lateral thinking in ways that anyone can learn and benefit from. And here's some more actionable advice: Instead of Yes and No, try Po. As a way to help suspend judgment and be more open to unconventional ideas, the author has come up with a linguistic tool that can be used to replace words like "No." It's Po! Po is meant to encourage the use of ideas that might come off as illogical or absurd at first. For instance, if someone begins to push back on a suggestion or say no during a brainstorming session, you can interject with, "Po…" and remind the team that all ideas are welcome. You can also start a suggestion with the word "Po" as a way of reminding the team that you're embracing lateral thinking. The more Po is used, the more effective a tool it becomes.