

## **Lateral Thinking**

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### *Abstract*

Most schools of thought associate thinking with logic; if it is clear and accurate argument, it is 'good' thinking. But in normal circumstances, it is more useful to see every possible side of a problem than to argue in a complicated way from one of them. Language provides the tool that lets us understand the world. The relationship between language and thinking is so close that there are many who still look upon thinking as word manipulation and all errors in thinking as language problems. Language is cultural; thinking is physical.

This paper is about the deliberate teaching of thinking as a skill and its practical use as part of the language-teaching curriculum. Lateral Thinking can be defined as a way of thinking that seeks a solution to a difficult problem through unusual methods or elements that would normally be ignored by commonsense thinking. Dr. Edward de Bono divides thinking into two methods. He calls one "vertical thinking," which uses the resources of logic-the traditional historical method. He calls the other "lateral thinking," which involves changing the obvious thinking order and arriving at the solution from another point of view.

Dr. de Bono's Lateral Thinking methods provide a planned, orderly process that results in new thinking. These skills can be taught and learned by students who become better students by adding strength to their natural abilities and improve their creativity and originality, which leads to more successful learning.

### **Introduction**

"Japan must think outside the box if it hopes to get ahead: creativity guru" read the headline of an article in the Friday July 18, 2003 Japan Times newspaper. Having lived and taught here in Japan for over twenty years, Edward de Bono's words rang true to me; but can the Japanese really change their way of thinking. De Bono went on to say that Japan needs to set up a "Ministry of Creativity" to think its way out of the economic slump it has endured for a decade. Perhaps members of the Ministry of Education should attend some of De Bono's creative thinking courses to help it out of its *educational* slump which would hopefully lead to much needed reforms in education.

Edward de Bono, author of 67 books in 38 languages on creativity including "Lateral Thinking" and "Six Thinking Hats," is regarded as the leading international authority in

conceptual and creative thinking and in the teaching of thinking as a skill. He designed and runs the CoRT Thinking Program, which is internationally the most widely used method for the teaching of thinking in schools and is in use by many countries around the world. He works with governments and some of the foremost corporations in the world such as IBM, NTT, Dupont, Shell and Ford. Some of the principles of his methods are presented here.

## **Discussion**

Lateral Thinking is a way of solving problems by using your imagination to find new ways of looking at a problem. Lateral thinking is close to what we usually call insight, creativity and humor. They have the same basis but while we think of creativity, insight and humor as talents or something that just happens; lateral thinking is a more deliberate process. It is a way of using the mind for logical thinking but in a very different way. Lateral thinking is an insight tool. It is also a process that can be taught.

In logical or vertical thinking the mind functions to create patterns out of its surroundings. Once the patterns have been formed, it becomes possible to recognize them, react to them and use them. As the patterns become more established, they become very efficient for handling information and forming what we call codes, so that anytime a particular situation comes up that we have dealt with a certain way in the past, the brain automatically goes to that pattern, much like a computer would. Except that the mind is a self-organizing, self-maximizing, memory system, which is very good at creating patterns or codes and of course that is the effectiveness of the mind.

Language is one obvious code system with the words themselves as triggers. The advantage is that it is easy to transfer a lot of information very quickly and without much effort. It helps us to react appropriately to a situation by identifying the situation from the initial aspects of it, just from the words we hear and we react as we have reacted in the past to the same words and the same situation. This is true of many areas of thinking where habit is important. When we first learn to drive we have to learn all the rules or codes for driving, but after a year or so these things become automatic. But even though this system of logical thinking is very useful it has limitations. When we are faced with new situations or when old methods don't work anymore, it is difficult to restructure the patterns or codes that we have set up in our logical or vertical thinking mind. Insight, humor, and creativity all involve escaping the restricting patterns of our usual thinking process. Lateral thinking involves restructuring, escape and the provocation of new patterns. It is concerned with the generation of new ideas.

Liberation from old ideas and the stimulation of new ones are two parts of lateral thinking. Lateral thinking leads to changes in attitude and approach; to looking in a different way at things, which have always been looked at in the same way. You cannot dig a hole in a different place by digging the same hole deeper. This means that trying harder in the same direction may not be as useful as changing direction. Effort in the same direction (approach) will not necessarily succeed.

Lateral Thinking is for changing concepts and perceptions. In logic you start out with certain ingredients just as in playing chess you start out with given pieces. In most real life situations the pieces are not given, we just assume they are there. We assume certain perceptions, certain concepts and certain boundaries. Lateral thinking is concerned not with playing with the existing pieces but with seeking to change the pieces. We change our perception.

One of the most interesting parts of De Bono's new way of thinking is his invention of the new word; PO: Beyond YES and NO and is the basic foundation of the revolutionary way of thinking maintained by de Bono in 1972. Our regular YES/No thinking system is very successful in the area of making the best use of fixed ideas, but is not very good at the perception stage, which requires creating new ideas and new ways of looking at things. Just as NO is the basic tool of logical thinking so a new word PO is given as the basic tool for perception. Logical YES/NO thinking is based on judgment but PO thinking is based on change. Both are good and necessary but we need to understand that ordinary thinking is unlikely to solve those problems, which need a new idea for their solution. PO lets us step outside the black versus white of the YES/NO mindset and change from the present thought pattern to creating new ideas. PO lets us imagine anything can be true. When using PO you simply write out statements that would normally seem absolutely impossible. Then you write the word PO immediately following your statement and accept it as possible. Then you work on ways to make it possible. The function of PO is to bring about a provocative arrangement of information without saying anything at all about it. The purpose of the arrangement is to lead forward to new ideas.

The PO that, "*the factory should be downstream of itself,*" led to the idea of making the input downstream of the output in order to increase consciousness of pollution. The random word is another one of de Bono's simple creative techniques. For example we need a new idea relating to some problem. You simply introduce a random word. In this case the problem is cigarette smoking. The random word was traffic light. From that quickly came the suggestion of putting a red band around cigarettes so that the smoker had a decision zone. If he or she

stopped at the red band, then the smoker was gaining control over his or her smoking habit. There are many ways that PO can be used to solve problems.

PO can be used as a laxative for those who have constipated minds that they wish to free. PO is like the reverse gear in a car. Without a reverse gear you get blocked in the first blind alley you come to. The reverse gear does not replace the forward gears but is necessary in addition. So, PO is necessary in addition to our logical or traditional thinking skills. Only a fool would try to drive on the reverse gears all the time, but only a fool would design a car without one. It is not how much you use the reverse gear that matters, but the ability to use it when necessary. A car without a reverse gear is useless except for going in circles. Culturally this is exactly what has happened in many areas here in Japan. There are four Japanese words or phrases that are my least favorite. They are impossible "*muri*," It can't be helped. "*shikataganai*," too much trouble "*mendokusai*" and difficult "*musukashi*." But if we replace all these words with De Bono's PO it opens up the way for further consideration of the problem. With PO we can reject fixed ideas and replace them with new and different ones.

Like logical thinking, lateral thinking is a general attitude of mind, which makes use of certain techniques. This attitude of mind can be taught in a formal setting using specific materials and exercises. De Bono has developed various, games, materials and exercises to encourage the development of the lateral thinking habit. Some of the props and items discussed may seem unimportant and strange, but it is the process that is important and the liberating effect it can have.

The CoRT program was designed by Edward de Bono and was first published in 1973. The name CoRT comes from the Cognitive Research Trust, which de Bono established at Cambridge, England. CoRT and consists of sixty lessons divided into six sections of ten lessons each, CoRT 1 to CoRT VI. The program offers instructions in a selection of specific thinking skills. It is recommended that CoRT lessons be taught with a mixture of direct instruction by the teacher, student group work, class discussion, individual work and homework projects.

The CoRT Thinking Lessons are the most widely used materials for the direct teaching of thinking as a basic skill. It is in heavy use throughout the U.S.A., in the U.K., Ireland, Canada, Australia, New Zealand, Israel, and Malta. In Venezuela it has been added to the curriculum of every school in the country. There has been an increased interest in the teaching of thinking as a basic skill and I think this program offers a simple and practical way to teach it. Here we

will consider "*Six Thinking Hats*" one of the basic tools of the system.

Edward de Bono's "Six Thinking Hats" is a technique that helps students adopt different views on a particular subject, which might be quite different from the view they would naturally take. In wearing a particular thinking hat, people play the role of that hat, as if that were the actual way they were thinking. For example one person might be against a particular idea, just to get the discussion going. The idea behind this system is that to make a wise decision we need to look at many different points of view. Each hat is named for its color and when one wears that hat they assume the point of view of that particular hat. Following is a list of the hats and the perspectives that they stand for.

<i>Hat (view)</i>	<i>Description</i>
White (Observer)	Neutral white paper, objective, FACTS, what is needed database. Calls for information known or needed
Red (Self, Other)	Emotions, Feelings, hunches, intuition Shows emotions, feelings and intuition
Black (Self, Other)	Strict Judge, critical, negative logical, why something is wrong. Is the Judge, says why something may not work.
Yellow (Self, Other)	Sunny, positive logical, looks for the good points. Symbolizes the positive and bright.
Green (Self, Other)	Creative thinking, New ideas, time for brainstorming. Talks about creativity, possibilities, new ideas
Blue (Observer)	Cool, steps, control of process, organizer, chairperson. Manages the thinking process

One hat is not better or worse than the other but allows us to look at something from all sides. Role-playing is used to discuss the subject and each of six students would wear a different hat or if a student had an idea he could come up and put on the hat that best represented that view. Later he might try on another hat for a different point of view. For example if you were discussing the question of the idea of being vegetarian the dialogue might look something like this:

WHITE HAT: (facts) *You will clog up your arteries on a diet loaded on saturated animal fat year after year and you're putting yourself at risk for the great killers of the Western world: heart attack and stroke.*

RED HAT: *Vegetarianism respects life! Every life is important! We shouldn't kill; even an ant, poor cows! Chickens! and pigs. It is so cruel how they are kept. I love all animals!*

BLACK HAT: *Vegetarianism will really mess up industry and could hurt the stock market, lots of jobs lost. This is a very bad idea!*

YELLOW HAT: *Vegetarianism could lead to worldwide peace, saving the ozone layer, bringing a more rewarding spiritual life!*

GREEN HAT: *If everyone adopted a vegetarian diet and no food were wasted, current [food] production would theoretically feed 10 billion people, more than the projected population for the year 2050.*

BLUE HAT: *Well we probably need to get more facts from the white hat and try to look at facts from both sides of the issue. Let's try to look at both sides of the story.*

This kind of thinking helps us to look at different views without arguing about them. Trying on different points of view is as easy as trying on a different hat.

## **Conclusion**

The idea that to be effective thinkers all our students' need is "all the information" is not correct. In these days of the Internet technology there is the danger of becoming overly dependent on technology for our ideas. No matter how much information our students have or how well they can use technology, if they don't learn to think for themselves and think creatively they will not be successful. Teaching thinking skills needs to be part of our educational system and special courses in the curriculum should be designed to teach thinking. In the recent Japan Times article de Bono summed it up this way, "What happens here (Japan) is that people don't want to change, they don't want to let go of the traditional, feudalistic, hierarchical, know-your-position approach." But they don't have to: The method of change is to learn an additional game (the creativity game).

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