

Train Your Brain To Think With The Six thinking hats

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Abstract:

Is the brain evolving? Can the brain be trained as a body? Is the story of the left and right brain real? Am I dealing with the left or right brain? Not so long ago, there was the idea that the human brain is not scalable, the brain that we were born with, we live with and we die with. So scientists called it a mystery, but in the 21st century, there was a revolution in brain science, new discoveries that highlighted the anatomy of the brain, and the ability to search its cells, the discovery of how its parts work, and the mechanisms of cognitive processes , and we focus our study on thinking that is one of the most studies areas in psychology, and we take it from the perspective of Edward de Bono, who is developing many strategies that work on Developing thought, among this strategy The six hats of thinking, which are divided the thinking into six patterns, neutral, and emotional, positive, and suggestions and final decision,. This paper presents a theoretical analytical framework of the brain and how it is trained to think with the strategy of the "six hats of thinking".

Keywords: Brain, Six thinking hats, cerebral hemispheres, Edward de bono.

INTRODUCTION

Every day scientists are discovering the precise pathways by which changes in human consciousness produce changes in our brain and bodies. Our consciousness—this phenomenal gift from God to be able to think—activates our genes and changes our brain. Science shows that our thoughts, with their embedded feelings, turn sets of genes on and off in complex relationships. We take facts, experiences, and the events of life, and assign meaning to them with our thinking. We may have a fixed set of genes in our chromosomes, but which of those genes are active and how they are active has a great deal to do with how we think and process our experiences. Our thoughts produce words and behaviors, which in turn stimulate more thinking and choices that build more thoughts in an endless cycle.⁽¹⁾ Thinking is the base of all cognitive activities or processes and is unique to human beings. It involves manipulation and analysis of information received from the environment. For example, while seeing a painting, you are not simply focusing on the color of the painting or the lines and strokes, rather you are going beyond the given text in interpreting its meaning and you are trying to relate the information to your existing knowledge. Understanding of the painting involves creation of new meaning that is added to your knowledge. Thinking, therefore, is a higher mental process through which we manipulate and analyse the acquired or existing information. Such manipulation and analysis occur by means of abstracting, reasoning, imagining, problem solving, judging, and decision-making.⁽²⁾

For this purpose we focused on strategies that train the human mind to think, Edward de Bono says « There is some evidence that the chemicals in the brain might be slightly different when we are being creative or positive or negative if this is so then we have to separate the different types of thinking because we cannot at any one moment have the best setting for different types of thinking ».⁽³⁾ And on this basis The De Bono division, thinking about six patterns to treat six types of thinking, and he called this type: « six hats to think ».

This research paper seeks to go deep into the strategy of six hats and how the human brain can develop its thinking. In this study, the

qualitative approach was relied upon as being appropriate for this type of inductive studies.

- How do we connect the six hats and the brain with the way we think?
- What is the brain and the mechanism of its work?
- How do we train the brain to think six ways?

This article aims to achieve these goals:

- Definition of Six Hats
- The importance of the cerebral hemispheres and the way of think.
- Training our brain to think with the De Bono's hats.

2. The six hats

Thinking can be a complex and confusing activity. Facts and figures seem to conflict with feelings and intuition ; playing "devil's advocate" can overshadow looking on the bright side of things»; relying on an argumentative style of attacking another's positions and defending one's own is often detrimental to generating creative responses to situations. In response to these thinking challenges, Edward de Bono, regarded as the leading international authority in the field of conceptual thinking and also the direct teaching of thinking as a skill, created a useful model of thinking called the "Six Thinking Hats." De Bono begins by distinguishing six modes of thinking, each identified with six colored hats.⁽⁴⁾

And defined also:

Six imaginary hats worn by a thinker for no more than 4-5 minutes, the color of a hat changes as the way of thinking changes, as Debono divides them into six types:

- 1) neutral thinking.
- 2) Emotional thinking.

- 3) negative thinking.
- 4) positive thinking.
- 5) creative thinking.
- 6) comprehensive thinking.

3. The six hats benefits

✓ The first one value of the six "hats to think" is the one of representation of a paper defined. The main restriction of the thought is defenses of the ego responsible for most of the practical errors of to think. The hats allow to think and to say things us that otherwise no we could think nor say without risking the ego.

✓ The second value is the one of to direct the attention. If we try that ours thought is not only reactive, we must find a way to direct the attention to an aspect after another one. The six hats are an average one to direct attention to six aspects different from a subject.

✓ Third value is the one of convenience. The symbolism of the six different ones hats offer an advisable way to request to somebody (even to same you) that it changes of way. You can request to which is or that it stops being negative. You can request to which gives a purely emotional answer.

4. Six Hats Description

Table. Description of the hats

White Hat	The white hat is about facts, information, axioms and logic, just like a computer.
Red Hat	Express your emotions and feelings.
Black Hat	negative hat judgment and logical criticism.
Yellow Hat	The opposite of the black hat is positivity and optimism .

Green Hat	Find alternatives, suggestions, and think outside the box.
Blue Hat	hat of The ultimate and holistic decision.

Source: Researchers

And More specifically:

White Hat: is neutral and emphasizes on the collection of information.

It is typically used at the beginning of the teaching scenario, as background for the thoughts to follow.

Some of the questions raised by anyone who wears it and called upon to answer are:

What is known about the subject of concern? When did it happen? What is its frequency?

How many people participated in it? Why did it happen? Is it real or not? What is the case? ⁽⁵⁾

How many people participated in it? Why did it happen? Is it real or not? What is the case? ⁽⁶⁾

Red Hat :The red hat allows feelings to appear, It's part of our thinking that we have to show, because here we don't have to justify or explain why we feel like this, and the red-spot thinker asks the following questionsWhat do I feel? Am I sad? What would I feel 10 years from now?

Black Hat: looks for pitfalls to avoid mistakes and risks. Individuals who have their 'black hats' on frequently or the majority of time may become black hats themselves. If this happens, too much critical thinking will lead to constant criticism and doubt. Thus, the first line of thinking will be towards the negative. It seeks to answer the following questions: What is the evidence? Are the suggestions fair, reasonable and applicable? What could prevent the operation of

the plan? What are the drawbacks Of the suggestions? What threats could be expected? ⁽⁷⁾

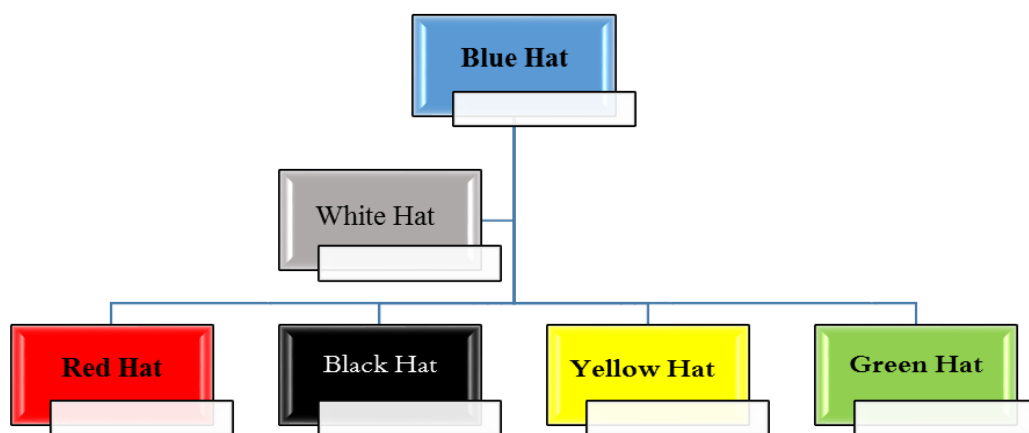
Yellow Hat: the yellow hat explores the positives and probes for value and benefit. The yellow hat role is for discussing only the positive view of problems and possibilities for solutions. ⁽⁸⁾

Green Hat: we need to make a creative effort. What are the alternative and possibilities? how do we overcome our black hat difficulties ?are there any other ways to do this ? Generate as many ideas as possible. ⁽⁹⁾

Blue Hat :control of the other hats, thinking about the thinking process, directs attention to other hats to faciliate « mapmaking » thinking. ⁽¹⁰⁾

As for the order of the hats of thinking, the researcher arranged it as follows:

Fig1.1. work mechanism of the six hats



Source: Researchers

5. 5. How the six hats train the brain to think?

5.1 The brain

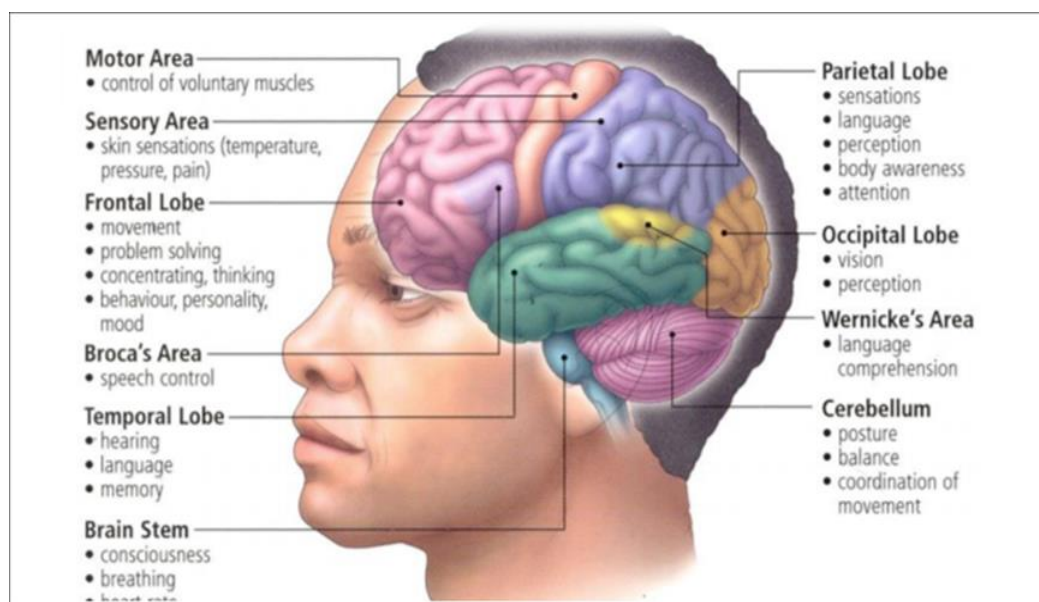
The brain is the most complex part of the human body. This three pound organ is the seat of intelligence, interpreter of the senses, initiator of body movement, and controller of behavior. Lying in its bony shell and washed by protective fluid, the brain is the source of all the qualities that define our humanity. The brain is the crown jewel of the human body. For centuries, scientists and philosophers have been fascinated by the brain, but until recently they viewed the brain as nearly incomprehensible. Now, however, the brain is beginning to relinquish its secrets. Scientists have learned more about the brain in the last several decades than in all previous centuries because of the accelerating pace of research in neurological and behavioral science and the development of new research techniques.⁽¹¹⁾

Brain is bilaterally symmetrical, soft, gelatinous structure weighting around 400 grams in infants and 1250-1450 grams in adults. The females have lesser brain weight than male. However, it does not mean that females are lesser intelligent than male since the relation between brain weight and intelligent is already disproved multiple studies. Brain is surrounded by meninges and then enclosed by a bony structure known as cranium. Brain is formed from five region namely telencephalon, diencephalon, mesencephalon, metencephalon, and myelencephalon from rostral to caudal region during embryogenesis. However these regions disappear with development and new structure emerges in the adult brain.⁽¹²⁾

5.25.2 Functional areas of the brain

The brain is composed of the cerebrum, cerebellum, brainstem. In (figure 2), the anatomy of the brain and the function of each part:

Fig.2. Functional areas of the brain



Source: (philippe Goldin, 2008)

5.3 Whole- Brain Thinking and the six hats

You may hear that someone is a “right-brained” or “left-brained” individual. This is called “brain dominance,” meaning that an individual has a natural preference for processing information on one side of the brain. The right side is considered the intuitive or spontaneous side, while the left side is logical. Knowing an individual’s brain dominance can help you understand his/her “ways” of thinking, behaving, speaking, and functioning. Also, it can help parents and educators tailor activities to a child’s natural learning preferences.⁽¹³⁾

Hemispherical functions By McCarthy & Morris, 1994

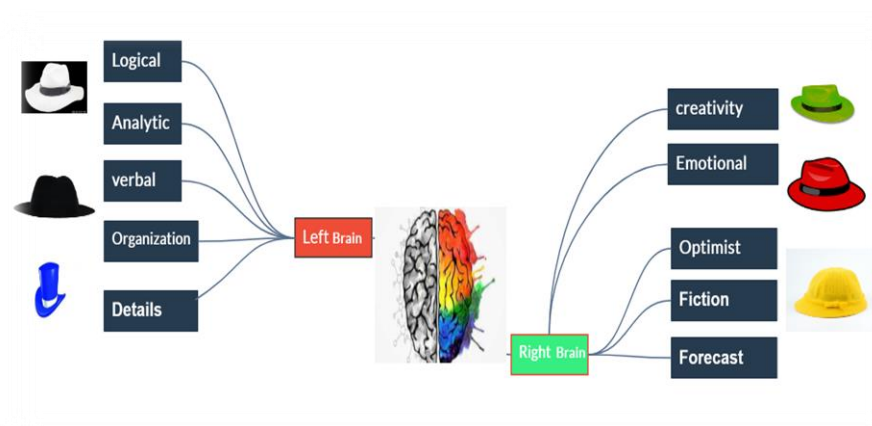
Table 2. Information processing patterns

Left Brain Information Processing Pattern	Right Brain Information Processing Pattern
Sequential	Holistic
Cognitive	Emotional
Analytical	Creative
Verbal	Visual
Logical	Artistic

Source: (Youcef Ibrahim, 2008)

The cerebral hemispheres has every activity that distinguishes them from each other. when the left-brain is dealing with facts, information, and logic, the right brain is concerning with creativity, imagination, and suggestion. So from this perspective, Debono assumed that there's an integrative nature of the brain's hemispheres, because they don't work apart, So the six hats to think correspond to the different colors to address different patterns of thinking, And the next figure(03) explain:

Fig.3. Six hats and two cerebral hemispheres



Source: Researchers

6. Train the brain with the hats

The purpose of training for the brain is to eliminate mistakes and to build up the most useful routines of performance.⁽¹⁴⁾

Simple steps to train the brain to think:

Think like a computer (white hat)

You take a subject that you think about, collect all the data, facts, shapes, statistics, make your brain like a computer.

Show your feelings (Red hat)

Let your feelings show that I give legitimacy to emotion without justification. Am I sad and happy? Do I want this? Will I regret it?

Be the judge (Black hat)

Ask is that true? Does it work? Be negative with logic and look for vulnerabilities.

Be optimistic and bright (Yellow hat)

Think of the bright side and say, "Be positive"

You are the creative (Green hat)

Give alternatives, suggestions, think outside the box, unleash your creativity.

Close your thoughts and make your decision (Blue hat)

You're the leader who controls thinking and other hats, discuss other ideas, what are the outcomes, is this final decision.

7. CONCLUSION

In this paper The researchers takes the view that the two cerebral hemispheres are complementary, and one has no control over the other, and this is what Edward de Bono sought from the six hats, he combined the right and left hemispheres, and he came out with six hats, he distinguished each one with color, so that the reasoner could

remember the color and significance of the hat, which the thinker can mix logic, emotion, negative, positive and creative to come up with the final decision, The human brain is constantly evolving, so it has to be trained in parallel thinking instead of the constant automatic routine thinking.

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