FREQUENTLY ASKED QUESTIONS
AND ANSWERS ABOUT WHOLE BRAIN TECHNOLOGY

Whole Brain Thinking: Quick View

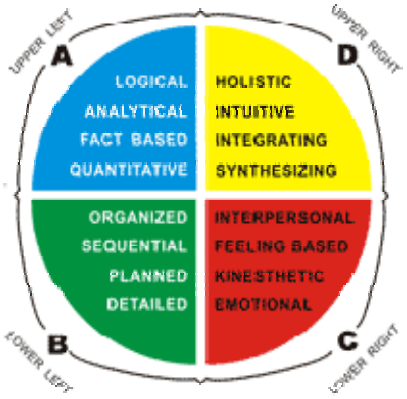
This Quick View will answer the following questions:

What is Whole Brain Thinking?

Have you ever asked yourself: "How can people be so clever and so dumb at the same time?" We have all met people who are very bright and capable in a given area or skill but seem totally incapable of something much simpler. The "absent-minded genius" is a good example. Scientific theory is no problem for this person but socializing at a party is. In business you often find a strategic, "big picture" specialist who never seems to notice details. How does this happen? Research on the brain has led to an understanding that each of us has a preferred way and mode of thinking that affects the way we take in and process information. The awareness of one's own thinking style and the thinking styles of others combined with the ability to act outside of one's preferred thinking style is known as "Whole Brain Thinking."

A simple model captures these thinking preferences.

The Whole Brain Model



The model was developed by Ned Herrmann, while head of Management Development at General Electric. Herrmann was a physicist by training, so he was intrigued by how the brain could help explain the clever/dumb issue described above. Using brain research developed by others and his own studies, Herrmann discovered that there were four patterns that emerged in terms of how the brain perceives and processes information. The Whole Brain Model emerged as a validated metaphor for describing the four different preference modes.

What are the four preferences?

The metaphor divides the brain into four separate quadrants. Each quadrant is different and of equal importance.
• The Upper Left Blue A Quadrant specializes in logical, analytical, quantitative, fact-based thinking.
• The Lower Left Green B Quadrant focuses on details and specializes in planning, organizing, and sequencing information.
• The Lower Right Red C Quadrant places a priority on feelings and the interpersonal, emotional and kinesthetic aspects of a situation.
• The Upper Right Yellow D Quadrant synthesizes and integrates information and is more intuitive and holistic in its thinking.

How did my preferences develop?

Experts agree--we are all the result of a combination of both nature and nurture. The degree to which we lean one way or another is the subject of ongoing debate that spans hundreds of years. The genetic predisposition we are each born with represents the "nature" aspect of who we are. The brain does not, however, exist in a vacuum. Every interaction we have with the world literally builds our brains throughout the course of our lives. Our parents, schooling, work and hobbies all have an impact. Due to the enormous impact of our environment throughout the course of our lives, Herrmann's theory was that we are who we are from at least 70% nurture and possibly only 30% nature. This represents a message of hope for individuals who are interested in ongoing growth and change in their lives. It is useful to reflect back on those influences and to consider the array of influences you've experienced. It can also be useful to explore ways in which you can build new activities and interests into your life as a personal or professional development strategy.

What is the research behind whole brain thinking?

Contemporary understanding of human brain function establishes that each brain is unique and that brains in general are specialized (e.g., left brain vs. right brain). While experts argue about the degree of specialization, there is general agreement on the fact of specialization. There is also agreement on the concept of dominance: eye dominance, hand dominance, foot dominance, ear dominance, and brain dominance. While the body is symmetrical in terms of organ duality, that is, humans have two eyes, two ears, two hands, two feet, and two hemispheres, experts agree that in the use of these dual organs there exists a general asymmetry. In other words, we use one to a greater degree than the other. When combined, the concepts of specialization and asymmetry of dominance produce within each human being a distribution of specialized preferences that affect general behavior.

Contained within the brain halves are two sets of major structures which are connected together. These include the two cerebral hemispheres connected by the corpus collosum, and the two halves of the limbic system connected together by the hippocampal commissure. These represent massive connections that allow for direct interaction between the two halves of the cerebral system and the two halves of the limbic system.

We know a lot more about the function of the two cerebral hemispheres than we do about the function of the limbic system. But, more and more understanding about each of these specialized areas emerges every day. While the cerebral hemispheres are thought of as the more cognitive, intellectual parts of the process, the limbic system is becoming known as the more organized and emotional aspect of our thinking selves. A key function of the limbic system is to transform information as it is input into the brain system, so as to position it for appropriate "processing." By reason of this role, the limbic system has a major effect on memory.

Why would I want to become more whole-brained in my thinking?

Whole brain thinking gives you the opportunity to improve both your work performance and your communication.

Have you ever finished a project or task and said, "Why didn't we think of that?" Or have you ever thought, "This person and I just don't communicate."

Using whole brain thinking means being able to utilize the thinking preferences of each of the four quadrants. It enables you to take a comprehensive view of any situation and look at it from a variety of perspectives. The result—you have literally "thought of everything."

In terms of communication, each quadrant has its own language which is the product of its thinking preferences. Typically, when someone is speaking a language we don't understand, we tune out. Whole brain thinking provides you with a framework for listening and speaking to other people. It enables you to "hear" what others are saying even when they are speaking in a different language. And it enables you to present your ideas in your listener's preferred language. The result—the lines of communication are opened up.

How can I become more whole-brained in my thinking?

An important application of whole brain thinking is the ability to "stretch" into lesser preferred quadrants for improved results. A useful metaphor is to think of your preferences as having natural elasticity, like a rubber band, that can easily expand into an area of lesser preference as required. Stretching into different modes will expand your thinking and allow for a more whole brained approach to your problem, decision or situation.

To start your "whole brain stretch," look at the whole brain model and identify those activities you find the most challenging. Which activities do you tend to skip or run out of time and energy to do? Which quadrants do they fall into? Next, think about the times of the day when you have the greatest and lowest mental energy. If you are a "morning person," schedule challenging tasks in the morning when you are the freshest. If you are a "night" person, give yourself a boost by working on your least preferred tasks later in the day or at night when you have the most mental energy. You'll find that the mental effort required to do even the most challenging tasks will be significantly reduced if you work on them when you have more mental energy.

Another way to stretch yourself or to go deeper into a quadrant is to actively seek out the input of people who naturally think in that way. Spend time with them to learn how they think through a situation. Additionally, if you are struggling to determine how a given quadrant would approach an issue, think of a person you know who thinks that way and ask yourself: "How would ____ handle that situation?" Find resources that can provide specialized input (e.g., books, websites, journals, training) that you may not have known about or have disregarded in the past.

Another way to "stretch" is to adopt whole-brain thinking as a mental model that guides your approach to tasks and projects in day-to-day situations. Start your task by asking: "What do I need to do to make sure I touch each quadrant?" End a task by asking yourself, "Have I considered all quadrants?" Be aware of the quadrants you usually don't get to, and start with those first. You can easily create a four quadrant "form" to do action planning by dividing a piece of paper into four boxes and filling in each box as needed. Practice improves this process and allows you to become more comfortable with the "stretch."

Even if you are naturally whole brained, it's possible to become more whole brained in your thinking. While natural whole brain thinkers usually consider all quadrants in their thinking, they may encounter

some challenges when a situation requires them to "go deep" into any one quadrant. Consider some of the following ways to "go deep": for the A Blue Quadrant, conduct an in-depth analysis of the numbers; for the Green B Quadrant, develop a highly detailed project plan and timeline; for the C Red Quadrant, facilitate a highly emotional conflict resolution discussion; for the D Yellow Quadrant, develop a long-range forecast that goes out 10 years.

In what kinds of situations can whole brain thinking be used?

Any situation that requires thinking that goes beyond a given quadrant's specialized mode can benefit from whole brain thinking. To insure that each quadrant has been explored in a given process, an approach called a walk-around" is used. For walk-arounds on several topics, go to [insert link here.]

Here are four examples of frequently used applications of whole brain thinking:

• Decision making. Most decisions benefit from a thought process that includes the review of multiple options and perspectives. A typical example is the purchase of a car. Quadrant A thinkers look at information on the actual performance of the vehicle. Quadrant B thinkers read a consumer report to gather research on the reliability and practical features (e.g., trunk size, safety records, etc.) of the vehicle. Quadrant C thinkers test drive the car to see if it "feels" right. And Quadrant D focuses on the aesthetics, color, styling, and innovations of each model offers. Using whole brain thinking--the thinking of all quadrants--contributes to a better choice and avoids unpleasant surprises. Overlooking even one quadrant can result in a less than ideal outcome. Imagine an individual that falls in love with a car because of the look, drive and feel, but neglects to check the trunk size only to discover after the purchase that his golf clubs don't fit in the trunk!

• Problem Solving. Every problem situation can benefit from a Quadrant A review of the data and facts, as well as an analysis of the real problem at hand; the Quadrant D "big-picture" context and possible creative ideas; Quadrant C viewpoint of the "customer" of the problem and how the problem affects others; and Quadrant B step-by-step process to solve the problem and implement the solution.

• Improving team interactions and performance. Most teams are formed to make the most of the differences among team members. But very often those differences stand in the way of the team living up to its potential. Whole brain thinking can help a team to acknowledge the differences among team members and then use those differences to make the most of the ideas of each team member. In addition, once a team knows its preferences it can use that knowledge to enhance its communication with other teams and work groups which may have thinking preferences that are quite different.

• Communication. The objective of most communication is to convey an idea, transfer information, or persuade someone. How many times have you experienced the frustration of delivering a message only to realize that the other person "just didn't get it." In order to communicate effectively, it's important to understand the "language" and mindset of the person(s) you are communicating with. A whole brain diagnosis of the audience can provide the critical planning information you need to tailor your language and presentation to the audience. When the audience's preferences are in doubt, taking a whole brain approach to communication ensures that you've covered all the "languages." This reduces the possibility of miscommunication and improves the chance that your message will be successfully received by the audience.

Is a preference the same as a competency?

A preference for a given activity and the competency required to perform that activity are not the same thing. A good way to separate the two is to think back to a time when you were in school, and a subject that you really, really loved. Your boundless interest would be more like a preference. Having that

interest did not necessarily mean that you developed skills and competencies--just that you were interested and that your mind engaged easily and tended to be energized when you were involved in that type of activity. Now think of a subject that you really hated or disliked. Imagine that you found yourself in a job that required competency in that subject area. You may have developed a competency in that area but a considerable amount of energy and motivation were probably required. We often develop competencies in areas of lesser preference that may require more effort or energy than skills in an area of greater preference.

Tips and Traps

Tips

1. Paying attention to your own mental process is the first step. Think about your thinking. Look for patterns of when you become "mentally stuck."
2. Note what types of mental activities energize you. Which activities drain you? Plan around the energy boost and drain.
3. Begin to recognize the primary quadrants that represent your preferences by noting when you find your thinking most satisfying and interesting.
4. Analyze how your preferences may get in the way of your effectiveness. Are there certain activities that you avoid, put off, or don't perform as well as you'd like?
5. Seek out help for those areas, either by tapping into your own thinking or getting help for a colleague or friend. Take a class. Build some skills.
6. Practice stretching into different quadrants within the context of a hobby or work activity you really enjoy. For example, if you enjoy home improvement, you can develop your A quadrant by understanding how an appliance really works; your B by paying attention to the timing and details of the project you are working on; your C by getting others involved and teaching them how to do a task; or your D by trying something new and different using color or design.

Traps

1. Don't pigeon hole yourself or other people into one or two quadrants. Keep in mind that we all have access to all of the quadrants and prefer some over others.
2. Don't assume that you know how others think. Check for understanding. Ask questions to gain insight.
3. Don't equate preference with competency or assume that just because a person has a preference that they cannot have any competencies in that area. We all have some degree of competency in each quadrant, and we often have to develop a skill in an area of lesser preference as a part of getting through our day-today lives.
4. Don't use your preference(s) as an excuse for not doing things you'd rather not do. It is counter productive to behave as if you cannot tap into the brain power necessary toget done what needs to be done.
5. Don't oversimplify the complexity of how our brains work. Remember that we all have access to each of these modes.
6. Don't assume that just because a person has a preference for a quadrant that they equally enjoy all the aspects of that quadrant. Remember that within each quadrant there are different types of thinking and we often do not have a preference for ALL of those areas. For example, a person who enjoys big picture thinking, use of metaphor and global perspectives in the D quadrant may not consider themselves creative or artistic.