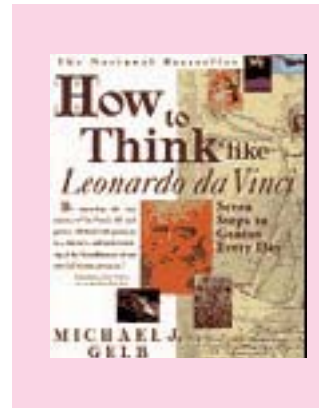


How to Think like Leonardo da Vinci

by Michael Gelb
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Overview

Leonardo da Vinci is recognized as one of the greatest geniuses of all time. He excelled in many areas such as the creation of the Mona Lisa, The Last Supper and other classic works. Besides art, Leonardo was an architect, mathematician, philosopher, and military planner. Michael Gelb reviews and explains Leonardo's notebooks, inventions, and works of art. He introduces readers to the Seven da Vincian Principles, essential elements of genius that can be developed. The book is a collection of illustrations, passages and exercises designed to stimulate anyone's awareness of their own creativity. This summary will briefly explain the seven principles and provide several of the sample creative exercises.

Key ideas

1. Curiosita- an insatiably curious approach to life and an unrelenting quest for continuous learning.

Talented people go on asking questions throughout their lives. Leonardo's childlike sense of wonder and insatiable curiosity, his depth of interest, and his willingness to question accepted knowledge never ceased. Curiosita is the first of Leonardo's characteristics that Gelb attributes to his genius.

Make a list of 100 questions that are important to you: How can you

save more money? Have more fun? Purpose of your existence? When are you most naturally yourself? What is your greatest talent? What legacy would you like to leave? How are you perceived by a close friend, worst enemy, boss, etc. Review the list and choose the ten that seem most significant. Then rank them in importance (You can add or rearrange questions at any time). This exercise can help you focus on your priorities and learn to think more creatively.

Find a topic such as a bird in flight, and ask ten questions about it. Why does it have two wings? How does it take off? Slow down? When does it sleep? Do the same for your career, relationship, health. No answers yet, just questions.

Pick one question and contemplate on it. For example, you could print it in large letters, find a quiet, private place and just sit with the question. Eventually the mind will incubate. Keep the pen moving. Take a break and go back and read aloud. Highlight words or phrases that speak to you most strongly. Look for themes, questions, metaphors.

The results can originate by extending a question. For example, Alexander Bell developed the telephone by modeling the ear and asking how it could be applied to other areas.

Ask yourself-

Who cares about it? Affected by it? Can solve it?

How does it happen? Can you look it from unfamiliar perspective?

Where does it happen? Did it begin? Where else has this happened?

Why is it important? Why did it start? Continue?

2. Dimostrazione- a commitment to test knowledge through experience, persistence, and a willingness to learn from mistakes.

As mentioned in the overview, Leonardo is recognized as one of the greatest genius of all time, but he also made some colossal mistakes.

For example, he attempted to divert a river, created an unsuccessful flying machine, etc. In spite of this, he never stopped learning, exploring and experimenting. He used continuous questioning of his own opinions, assumptions and beliefs, and was able to build on his successes.

Examining experience- what are the most influential experiences of your life? What did you learn and how do (or could you) apply what you have learned from them? How have these experiences colored by attitudes and perceptions? Can you rethink some of the conclusions drawn at the time?

Pick a topic, such as human nature, politics, art, religion, sexuality, etc. Write down at least three ideas, opinions, assumptions or beliefs that you have about the topic, such as: It is human nature to resist change. Then ask yourself: How did you form this idea? How firmly do you believe it? What would it take for you to change the belief? Which beliefs inspire the strongest emotions?

Possible sources of your belief include, media, other people, your experiences, etc. Try making the strongest possible argument against your belief. Would your views change if you were in another country? 20 years older? from a different race? opposite gender? etc.

Be aware of the various influences: go through a magazine and analyze the strategy and tactics of each ad, which ones effect you the most? What is the editorial slant?

Learning from mistakes- what did you learn in school or from your parents about mistakes? Which ones do you repeat? What role does fear of making mistakes play at work, at home? Leonardo faced false accusations, exile, destruction of his works, etc.

Learning from anti-role models. Make a list of three people who have made mistakes that you would like to avoid. How can you learn from their mistakes? What did you learn from your worst teacher?

3. Sensazione- the continual refinement of the senses, especially sight as the means to enliven experience.

Sight, sound, touch, taste and smell are the keys to opening the doors of experience. Leonardo had uncanny visual acuity, nurtured by a boyhood spent observing the natural beauty of the Tuscan countryside. Da Vinci's gaze allowed him to capture exquisite and unprecedented subtleties of human expression in his paintings. He also developed his hearing and was a brilliant musician.

Practice exercises-

1. Focus near and far, soften your eyes by relaxing the muscles of your forehead, face and jaw. Allow a receptivity to the broadest possible expanse of vision. Make a list of your favorite painters and immerse yourself in their work- study their lives, hang reproductions. Spend one day concentrating on each artist.

2. Visualizations- picture events in your mind. Make them multisensory- imagine the sights, sounds, feel smell and taste of success. Post imagine- see past event as it should have gone. Preimagine- imagining of things to be.

3. Layered listening- once or twice each day pause and listen to the sounds around you. Listen for the loudest and softest and find the layers of sounds.

Listen for silence- listen for the spaces between sounds.

Listen for patterns of tension and release in music. Listen for emotion: tragedy, sadness, gloom, jubilation. Why do these sounds affect you as they do?

Think of your various daily activities and the ideal musical accompaniment.

Aroma: we take about 23,000 breaths per day. We can smell one molecule of odor-causing substance in one part per trillion of air.

Expanding your olfactory vocabulary- perfumeries categorize smells as floral (roses), ethereal (pears), resinous (camphor), foul (rotten

eggs), and acrid (vinegar).

Taste: reflect on the origins of the meal you are eating and try to be 100 percent present as you taste the first bite of the food. **Wine tasting-** organize around a theme: compare California Chardonnay with a similar French wine. Or taste three different vintages of Chianti.

Touch- touch the objects around you as though you are experiencing them for the first time. Try touching several objects while blindfolded. Describe the texture, weight, temperature and other sensations.

Other- vocalize the sounds inspired by the colors, shapes and textures on the canvas. **Sculpt a piece of music,** how would the music smell? Taste like?

Transforming a work space- add favorite paintings, full-spectrum bulbs, fresh flowers, coffee lounge becomes the 'creative break room' filled with colored pens, flip charts, erector sets, stickers, etc.

4. Sfumato- a willingness to embrace ambiguity, paradox and uncertainty.

The Mona Lisa's smile lies on the cusp of good and evil, compassion and cruelty, seduction and innocence. She is the Western equivalent of the yin/yang, and is very similar to his self-portrait. Expression rests on the corners of the mouth and eyes.

Making friends with ambiguity- describe three situations from your life, past or present, where ambiguity was a factor. Examples: layoffs at work, the future of a relationship, etc.

Anxiety- describe the feeling of anxiety. Are there different types? Where in your body do you experience it? If it had a shape, color, sound, taste, what would they be?

Confusion endurance- can you see the relationship and connection between happiest and saddest moments of your life, intimacy and independence? Strength and weakness? Good and evil? Change and consistency? Humility and pride? Life and death?

Neuroscientists estimate that the unconscious database outweighs the conscious on an order of ten million to one. Learn to consult this unconscious database. Reminiscence Effect- working for an hour and taking a ten minute break to assimilate the information.

5. Arte/Scienza- the development of the balance between science and art, logic and imagination. Whole brain thinking.

For Leonardo, art and science were indivisible. He believed that the ability of the artist to express the beauty of the human form is predicated on a profound study of the science of anatomy. Gelb believes that mind mapping is a simple yet powerful way to cultivate a synergy between art and science in your everyday thinking, planning, and problem solving.

Mind mapping is a whole-brain method for generating and organizing ideas, largely inspired by Da Vinci's approach to note taking. Use pictures, images, color coding, highlighting to stimulate the creative association and enhance the memory. Write the main idea in the middle of a page and connect other ideas with pictures, images and keywords (Gelb has also published a book on mind mapping).

Mind map your next day off- smiling sun with branches for what you want to do.

Mind map of a mind map- generate at least twenty specific possible applications of mind mapping for your personal and professional life.

Memory mind map- think of something you want to remember and create a map with vivid images of the most important points. Take a break, and try to re-create it from memory.

6. Corporalita- the cultivation of grace, ambidexterity, fitness and poise.

Leonardo's extraordinary physical gifts complemented his intellectual and artistic genius. He was well-known for his poise, grace, strength and athletic ability. Walking, horse riding, swimming, and fencing were Leonardo's favorite forms of exercise. He believed that a thoughtful diet was the key to health and well-being and believed that we should accept personal responsibility for our own health.

A few of his tips to maintain health include: beware of anger and avoid grievous moods, rest your head and keep your mind cheerful, be covered well at night, exercise moderately, eat simple, chew well, etc. Leonardo emphasized the balanced use of both sides of your body for painting, drawing, and writing.

Practice exercises- for flexibility, bring your full awareness to the process, and allow easy release of the muscle groups in harmony with extended exhalations. Never bounce or try to force a stretch. Mirror observations- watch yourself in a mirror, Does your head tilt? Is one shoulder higher? Does the pelvis rock forward? Weight distributed evenly? Any parts appear tense? Balanced alignment? Make a drawing of your body- color in red the places where you feel the most tension and stress. Black for any areas where your energy is blocked or the parts where you feel the least. Green for parts that feel the most alive.

Record the appropriateness of effort in your daily activities such as sitting, bending, lifting, driving, talking. Am you stiffening your neck? Raising your shoulders? Holding your breath? When you work at the computer, meet someone new, talk on the phone, tie your shoes, eat dinner, hit a tennis ball.

Develop ambidexterity- try using non-dominant hand for specific

activities, write with both hands simultaneously. Comb your hair or stir your coffee with your non-dominant hand. Juggle. Try making five different movements at once.

7. Connessione- a recognition of and appreciation for the interconnectedness of all things and phenomena. **Systems thinking.**

One secret of Leonard's creativity was his lifelong practice of combining and connecting disparate elements to form new patterns. Many of his inventions and designs arose from the playful, imaginary combinations he made of different natural forms.

Practice exercises-

1. Notice patterns in nature, such as water rippling, and how it is similar to other objects. Combine and connect disparate elements to form new patterns.

2. Use of imaginary dialogues- Hillary Clinton and Eleanor Roosevelt. Imagine discussions on your problem or issue between different characters: Donny Osmond and Timothy Leary, Bill Gates and Steve Jobs, Christ and Buddha.

3. Origins- think of the origins of things in your life. Where did they come from and what process has shaped them? Look at the origins of things, such as food, a book, clothes you are wearing, your computer, etc.

4. Micro/Macro contemplation- appreciate the coordinated workings of your digestive, circulatory and immune system, the harmonious activity of the tissues and organs, move down to the cellular level, deeper to the molecular level. Then think of yourself as part of a subsystem- family professional, economic network. Your connection with systems of information- cables, satellites, and computer chips that link you with millions of other minds. See earth through the eyes of the astronauts.

5. Visualize your life as a river, sketch a timeline of your life and describe the dams, levees, whirlpools, rapids, and waterfalls of life so far. Use your power of choice to direct the course and duality of

the river of your life.

6. Create a mind map of your life from the perspective of the seven da Vincian Principles:

Curiosita- are you asking the right questions?

Dimostrazione- how can you improve your ability to learn from your mistakes and experiences? How can you develop your independence of thought?

Sensazione- what is your plan for sharpening your senses as you age?

Sfumato- how can you strengthen your ability to hold creative tension, to embrace the major paradoxes of life?

Arte/Scienza- are you balancing art and science at home and work?

Corporalita- how can you nurture the balance of body and mind?

Connceione- how do all the above elements fit together? How does everything connect to everything else?