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LESSONS FROM

THE ART OF JUGGLING

HOW TO ACHIEVE YOUR FULL
POTENTIAL IN BUSINESS,
LEARNING, AND LIFE

MICHAEL J. GELB AND TONY BUZAN



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MASTERY BY OSMOSIS

The quality of a person's life is in direct proportion to their commitment to excellence, regardless of their chosen field of endeavor.

-VINCE LOMBARDI

In the early days of his juggling career, Michael practiced for some time without particularly noticeable gains. One day while walking in the park, he happened upon a group of professional jugglers and spent hours observing while they performed. The following day, as if by magic, he found he was able to perform many of the tricks he had witnessed that he had previously been unable to do—it was as though he had absorbed the tricks by osmosis. Back then, he did not fully understand the phenomenon, but now he—and we—do. This chapter will show you how to make this learning by osmosis a conscious process.

MODELS OF EXCELLENCE

1. Juggling in the Mind's Eye. Any learning process or new activity you decide to pursue—be it juggling, business, sport, academics, or other area of endeavor—begins with the formation of an initial mental image or goal. If you want to learn skiing, you begin with a vague picture in your mind of yourself plummeting down a snowy slope. If you want to learn to scuba dive, you imagine yourself under water. If you're planning to get married, you picture yourself and your partner living happily ever after.

You probably picked up this book because you want to learn how to learn and learn how to juggle. If you've never juggled before, the chances are, in your mind's eye, you start with a vague picture of juggling, perhaps imagining balls or other objects dancing from your hands. If you practiced the exercises in the previous chapter, your mental image of juggling will be clearer and more complete. As you continue to practice and receive instruction, your internal picture of juggling will evolve.

As your mental image evolves, it will expand to include the senses of touch, sound, and kinesthetic moving awareness. To accelerate your learning, establish multidimensional, multisensory images of excellence at the beginning of all your learning endeavors and now, at the launching of your juggling career.

Baby ducks learn to survive by imitating their mothers. Learning through imitation is fundamental to many species, including humans. As we become adults, we have a unique advantage: we can choose who and what to imitate. We can also consciously choose new models

to replace previously imitated but no longer functional models.

Since the learning process begins with the formation of a mental image, you may as well choose the best. If you want to become a great juggler, spend as much time as you can watching great jugglers. If you want to become a great tennis player, observe the best players. If you want to become a leader, study the great leaders.

Whatever your discipline, become a student of excellence in all things. Take every opportunity to observe people who manifest the qualities of mastery. These models of excellence will inspire and guide you toward the fulfillment of your highest potential.

Common sense tells us that in order to achieve success, we must set goals—we must create a vision. Base your goals and nurture your visions with evolving multisensory images of excellence.

2. THE QUALITIES OF EXCELLENCE. How can you recognize excellence when you see it? How can you separate the great from the very good? When developing models of excellence in any discipline, seek the following qualities:

Appropriate Effort/Poise. Appropriate effort can be observed in the movements of a cat, a master at a craft, and in the performance of many champions. It involves applying the right amount of energy in the right place at the right time. In other words, the absence of wasted energy, an economy of movement.

Witness the apparently effortless grace of Rubinstein at the piano, Fred Astaire gliding across the dance floor, Muhammad Ali (in his prime) floating like a butterfly (at 225 pounds!), Pete Sampras win-

ning Wimbledon, and Florence Griffith Joyner (Flo Jo) beaming her way to new world records.

Flo Jo's smile, while winning the Olympic gold medal and breaking the world record at the same time, was a perfect example of mind and body in glorious harmony. "She makes it look so easy!" cries the commentator. Such performances are perfect examples of appropriate effort, the natural expression of the human body and mind used according to design.

Commitment to Continuous Learning. On his deathbed, Pierre-Auguste Renoir painted a picture of a flower. As he died, he mused, "I think I'm beginning to understand something about [art]." Renoir possessed the characteristic of all true masters: a life-

long commitment to learning.

Whether they are practicing or involved in competition or creation, masters of all disciplines learn from every aspect of their participation, gathering information equally from their successes, plateaus, and failures. This commitment to continuous improvement is the key to individual excellence. It is also the cornerstone of organizational high performance and is at the heart of the quality movement.

High Standards and Personal Accountability. According to an ancient Japanese proverb, "When you have completed 95 percent of your journey you are only halfway there." The willingness to travel the last 5 percent separates the great from the very good. As Somerset Maugham said, "It's a funny thing about life; if you refuse to accept anything but the very best, you very often get it." Champions demand the best from themselves and don't make excuses. They take full responsibility for the results they achieve.

Enjoyment and Oneness. Along with the ease and flow masters display, most enjoy and are totally immersed in their activity, no matter how extreme their effort. Great artists, athletes, and musicians become entirely absorbed in their feats of creation and achievement. They report a sense of timelessness and oneness with their activity, which can be described as "ecstasy."

Commitment and Discipline. True excellence is only achieved through total commitment and consistent discipline. Discipline does not refer to a mindless, mechanical, grim, stiff-jawed approach to learning. Rather, it entails an organized, intelligent, aware, consistent, enthusiastic, unrelenting commitment to a process that leads to the realization of a goal.

In the years that we have been teaching accelerated learning, we have discovered many ways to make the learning process faster and more enjoyable. At the same time, however, our respect for the traditional values of perseverance, commitment, and discipline has only grown deeper. For any meaningful accomplishment, disciplined practice is essential.

So: What does practice make? Perfect? Not necessarily! The key is to practice with a commitment to practicing at the highest level. In the words of the legendary American football coach, Vince Lombardi: "Practice doesn't make perfect. Perfect practice makes perfect!" This phrase emphasizes that continuing practice based on an inaccurate model can make you increasingly less skilled in your chosen areas of endeavor. Understanding the correct models and qualities of excellence provides a key to perfecting your practice. Next, let's focus on how to model these models.

HOW TO SEE

The key to getting the most out of your observation of models of excellence is to integrate two modes of perception: focused-analytical and open-receptive.

- 1. FOCUSED-ANALYTICAL. In this mode of seeing, observe and analyze the technical elements of the performance of those who excel. Study in detail the manifestations of the fundamental elements of their discipline, noting both those things that they do as well as those things they do not.
- 2. OPEN-RECEPTIVE. In this mode of seeing, you observe excellence with the eyes of a child. You need not analyze but simply "breathe in" the entire multisensory image, imagining the quality of excellence spreading throughout both your body and mind, becoming part of your own essence. You can think of this way of seeing as nourishment or brain food.

Let's say you have the opportunity to spend a few hours watching the world's greatest juggler. How can you get the most out of your observation? Begin by studying specific elements of the juggler's technique (focused-analytical); note the positioning of the elbows and hands, body posture, facial expression, and breathing rhythm, height and trajectory of the throws, and so on. As you study what the juggler is doing, you're also learning what she is *not* doing: raising shoulders, holding her breath, etc. Then, shift to the open-

receptive mode: watch the "whole pattern" of your master juggler. As you watch, allow your body to move in harmony with the juggler's rhythm. Listen to the sounds of the pattern and incorporate them into your overall feeling of excellent juggling.

EXCELLENCE VIDEOS

Of course, until you become one, it's not always practical to have a master juggler around the house. In the meantime, you can nurture your evolving model of excellence by using videotapes. Watch tapes of the greatest performers in your chosen area of endeavor (you may rent, buy, or make your own). Apply both modes of seeing on a regular basis—immersing yourself in brain-nourishing images of excellence!

An interesting subliminal example of this phenomenon on a mass scale takes place each summer in England, when the Wimbledon tennis tournament is shown on television. Tennis coaches around the country report a marked improvement in the performance of their students and club members in the weeks following the tournament. Now we know how to take conscious advantage of this "Wimbledon effect."

In the old days, top collegiate and professional sports teams used to watch game films and point out all the players' errors. While this practice continues into the present, teams have added a new dimension. Now, they watch the game films and catch players "doing something right." Players are encouraged to watch videos of their performance, "doing something right"—over and over—to imprint the image of their high performance onto their minds and bodies.

VISUALIZATION

Your brain is the greatest audio-video producer on the planet, able to produce far more films and shows than have been created in the history of Hollywood! The greats have always used this "internal-vision-scape" to lead them in their chosen destiny. It is a capacity that everyone has, waiting to be used to its potential.

In order to take full advantage of the images of excellence that nourish your brain, you can use your synaesthetic (using all your senses) imagination to create your own internal video replays, with yourself as the star. In these replays it is important to visualize yourself succeeding. Refine your image of perfection and see yourself displaying the qualities of appropriate effort, complete enjoyment, dedicated discipline, ease, and grace.

DOES IT WORK? A growing body of evidence, from experiments performed by psychologists around the world, shows that visualizing works. One of the classic experiments was conducted by Australian psychologist Alan Richardson:

Richardson took three groups of people and tested their performance in basketball free-throw shooting. The first group was told to practice every day for twenty minutes. The second group was told to forget about basketball altogether. The third group was told to sit down, relax, and imagine themselves successfully sinking free throws for twenty minutes. Richardson instructed them to feel themselves releasing the ball, see the perfect arc, hear the sound of the

ball swishing through the net, and feel the satisfaction resulting from that imagined success.

At the end of the experimental period, he retested the three groups and found that the first group, the ones that actually practiced each day, had improved their shooting by 24 percent. The second group, who were instructed to completely forget about basketball, had made no improvement. The third group, the ones who were told to "just think about it," improved their shooting percentage by 23 percent.

Other experimenters have replicated Richardson's results, not only in basketball free-throw shooting but also in a wide range of other activities, including dart throwing, ring-tossing, skating, and karate. The conclusion is that visualization, especially when it is multisensory, can produce a marked increase in actual performance.

THE GREAT VISUALIZERS. In addition to experiments previously mentioned, history is rich with great visualizers from all disciplines. John F. Kennedy, the entire American scientific community, and indeed, the American people in the 1960s envisioned a human being setting foot on the moon by the end of the decade. With appropriate effort and discipline, that vision became a reality.

Jack Nicklaus has stated that at the top level of professional golf, 80 percent of success depends on the image of excellence the golfer carries; or in the inimitable words of Yogi Berra, "90 percent of the game is 50 percent mental!"

Muhammad Ali's visualization was so powerful he "injected" his images of success into the minds of his opponents, encouraging them to fall when he said they

would. They did. In planting those images, Ali used sound, rhythm, and timing to project to his opponents the sense of *feeling* his punches land, the sound of the fans cheering for him, and so on.

Artists from past to present, from Michelangelo through Picasso to such modern-day artists as Australia's Lorraine Gill, visualize perfect images and then apply dedicated discipline to making those images become a reality. Michelangelo reported "seeing" the image of his sculpture in the stone and simply removing the unnecessary and inappropriate material until only his perfect vision remained. Lorraine Gill, in less than one week of creative visualization, first sees and then sketches an entire series of paintings on the nature of perception. She will then spend the next decade refining the reality on the canvas to coincide with her original vision.

It would be very interesting to record photographically, not the stages of a painting, but its metamorphoses. One would see perhaps by what course a mind finds its way towards the crystallization of its dream. But what is really very serious is to see that the picture does not change basically, that the initial vision remains almost intact....—Pablo Picasso

One of our favorite examples of the power of visualization is the saga of Major James Nesmeth. Nesmeth was an average club golfer who regularly shot in the mid-nineties. During a tour of duty in Vietnam he was captured and sent to a prison camp. Living in a tiny cell, isolated from others, Nesmeth was held in terrible conditions for seven years. To maintain his sanity he

began practicing visualization, playing eighteen holes of golf in his mind's eye every day. Nesmeth imagined himself on his favorite course, dressed in his favorite outfit. In his mind's eve, he created a vivid sensation of every detail; the sound of the wind blowing through the trees along each fairway, the smell of the freshly cut greens. He savored each step around the course and pictured all the possible shots he might need to make under different weather conditions. For every shot, he chose the appropriate club and felt his hands cradle it with a perfect grip. He imagined the sensation of a perfect swing, listened to the sound of the club making perfect contact with the ball, and then pictured a perfect follow-through. He'd watch the little white orb sail through the air, landing just on the spot where he wanted it to go. When Nesmeth was finally liberated he returned home and went straight to his favorite golf course. He shot a seventy-four, twenty strokes better than his previous average—twenty strokes better, without touching a real club in seven years!

In many other areas, from business to medicine and beyond, stories abound of visionaries and seers who followed their evolving ideal images and, by application and dedication, made them real. Stephen Covey, author of *The 7 Habits of Highly Effective People*, calls this "beginning with the end in mind." Covey emphasizes that all accomplishments are created twice: first in the mind and then in the world.

Most of us visualize on a daily basis, but we often do it unconsciously and in a negative fashion. It is called worrying. What happens to our bodies when we worry? We tense up, disrupt our normal breathing, and psycho-physically prepare ourselves for failure. Instead, learn to use positive visualization to prepare yourself for success. As you do you will transform the energy

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that supports your worrying into fuel for making your dreams come true.

THE MIND/BODY CONNECTION AND VISUALIZATION.

Visualization works because the mind and body are linked in a profoundly intimate way. Science is just beginning to understand this connection. One of the most fascinating studies was conducted by Dr. John Basmajian of Emory University. Basmajian took extremely fine electrodes and connected them to single motor muscular units in people's forearms. By connecting these electrodes to an oscilloscope and an audio amplifier, Basmajian was able to record the electro-contractile pattern of each motor unit. This unit consisted of one nerve cell and a tiny muscle bundle, and each one showed its own special pattern, unique from the others in both the shape of the spikes on the oscilloscope and in a corresponding "popping" sound recorded on the audio amplifier.

Basmajian then discovered that by just envisioning it, people could change the firing pattern of each individual unit. He went on to report that "most persons became so skilled they could produce a variety of rhythms such as doublets, triplets, galloping rhythms and even complicated drum rolls and drum beats."

The power of visualization can affect individual motor units and change the muscular activity around those cells. Thus, positive, conscious, multisensory visualizations of excellence energize the muscle groups needed to perform an action, subtly tuning the entire mind and body to *appropriate effort* at the time of performance.

TIPS ON VISUALIZATION. The following thoughts will help you get the most from your visualization practice:

Know You are Equipped. Realize that everyone (including you) can visualize. If you feel you do not have the ability to visualize, ask yourself if you can describe—even roughly—the following objects: your car; an elephant; your home; an apple. Obviously, you can.

These images reside in the occipital lobe of your brain. The occipital lobe acts as your own personal biocomputerized archive, storing billionfold collections of images from your personal history. At this very moment, this part of your brain has the potential to store an infinite series of new images and, in conjunction with your frontal lobes, to create that many more.

Some people naturally see these images vividly while others think that their mind's eye does not offer up clear pictures. The benefits of visualization practice accrue even if you just "think" about your desired goal without seeing technicolor images in your mind's eye.

The ability to picture a desired outcome is built into your brain, and your brain is designed through millions of years of evolution to help you succeed in matching that picture with your performance.

Make Your Visualization Multisensory. The more thoroughly you involve your senses, the more powerful your visualization becomes. As you visualize juggling, for example, imagine the feeling of the shape, texture, and weight of the balls in your hands. See the color of the balls and picture their perfect trajectory. Listen to the rhythmic sounds of a perfect cascade.

Unless you are already a master, your visualization will have gaps in it. Take whatever images you have,

and over the days, weeks, months, and years use your models of excellence to furnish your visualization with greater depth and richness.

Practice. Just like any other skill, your ability to visualize will improve with practice. Commit yourself to a regular schedule of mental practice. Some of the best times for practicing visualization include:

- in the morning upon waking
- at night just before you go to bed
- when you are a passenger in a train, plane, boat, or auto
- when taking a break from work
- after meditation, yoga, or exercise, or anytime your body is relaxed and your mind is free.

Visualize Outside-in and Inside-out. When visualizing, imagine that you are watching yourself from the outside. For example, if you are visualizing a ballroom dance routine, watch yourself from the perspective of the judges. Then, "reenter" your body and visualize your perfect dance from the inside out. Then, experiment with merging your inner and outer visualizations!

Distinguish Between Fantasy and Visualization. It's fun to fantasize about being a great juggler, athlete, or millionaire, but fantasizing is not the same as visualizing. A fantasy does not require conscious attention and it is not as focused or energizing as a visualization. Visualization is conscious work. Of course, your fantasies and daydreams may plant the seeds for your visualizations, but dreams only become real as the result of work that takes place first in the mind, then in the world.

Become your vision. "Become" your model of ex-

cellence. Many of the great actors, such as Sir Laurence Olivier, Bette Davis, and Marlon Brando, regularly reported being "overcome" by the characters they played. Do that: immerse yourself in images of excellence.

Keep it positive. When doubts, fears, or negative images arise, acknowledge them, and then reinforce your image of success.

WHAT ABOUT REALITY?

Models of excellence and visualization are key ingredients in achieving high performance. Yet without accurate information about our current level of performance, they are incomplete. Many practitioners of New Age positive thinking fall into the trap of onedimensionality: constantly affirming visions of wonderfulness without honestly assessing reality. They use visualization and affirmations as an escape from reality rather than as a tool to improve it. In order to progress, you must be able to compare your visualization of excellence with your current level of performance.

You need accurate feedback to lead you effectively and efficiently to your goal. Make honest assessments of what you want, and of where you are now. It is essential to see yourself clearly and truly, eliminating subjective fear-based, ego-centered interpretations or misinformation. The potential energy between your present status and your goal creates a positive and dynamic tension, which, when you allow it, will naturally manifest itself in achievement. Many of us have difficulty getting this necessary, accurate information for

the following reasons:

SUBJECTIVITY. We live "inside ourselves," so it is difficult to view ourselves from the outside. When learning to juggle, for example, you may *think* that you are throwing the balls up in staggered timing (cascading) when in reality you are handing them across (showering). Frequently, you will remain unaware until you see yourself in a mirror or video, or receive feedback from a partner or a coach.

We use video feedback as a training tool in many of our seminars. Participants are often amazed to discover the discrepancy between their perceptions and the truth the video reveals.

HABIT. Our habitual ways of acting and perceiving can lock us into limiting patterns that start to feel normal. This syndrome was first described by F. M. Alexander, who called it "debauched kinaesthesia."

Alexander observed that when we experience a new, superior, more natural behavior, it often feels *un*natural because our more practiced patterns have become "normal." In other words, right feels wrong because wrong has become normal and *assumed* right! Take, for example, the person who habitually slouches. When adjusted into a fully upright position, the person reports feeling off-balance and about to fall over!

FEAR. Even if accurate information is available, fear will often prevent us from utilizing it appropriately. Many of us grow up with the idea that mistakes are bad, linking our self-esteem with continued successes. We become afraid of making mistakes. So in order to

achieve success, we tend to steer clear of areas that may lie outside the apparent realm of our natural talent. In this perverse equation, the secret of success becomes avoiding failure, leaving much of our potential untapped.

In order to reach our full potential to learn, we must accept and then transform anxiety and fear, relentlessly seeking accurate information on our performance. What used to be perceived as criticism now becomes a gift for constructive growth.

THE LEARNING SPIRAL

In order to access your full capacity for learning, your brain needs two kinds of information: (1) clear goals and (2) accurate feedback. Both ingredients are essential. If you have a clear vision but inaccurate feedback, you will be deluded, living in a fantasy world. If you have accurate feedback but are without vision, you will be uninspired and stagnant. If you have neither, well . . . you probably wouldn't be reading this book.

The gap between your evolving images of excellence and increasingly pure objective data on your performance energizes the learning process. This creative tension, *embraced with a commitment to success*, results in a continuous, positive spiral, accelerating you toward and beyond your goals.

Your brain is a success mechanism, and this comparison process is its operational secret. As you come to understand and practice it, you will realize that if you choose it, your success in juggling, learning, and life is inevitable.

GUIDELINES FOR EXCELLENCE

- Seek excellent jugglers and videos of their performances to help you form your models of excellence.
- Make visualization an integral part of your juggling practice.
- Visualize synaesthetically (using all your senses), concentrating on the feel of your juggling balls, their color, rhythm, sound: imagine the sensation of the juggling flow state!
- Join the International Jugglers' Association, and attend the annual festival, where you can immerse yourself in a total juggling experience. (International Jugglers' Association, Box 218, Montague, Massachusetts 01351. 413–367–2401.)
- Practice with playfulness, relish, and joy.
- Take every opportunity to gain objective feedback on your juggling: watch yourself in the mirror; record yourself on video; ask friends for help.
- Be a student of excellence in juggling and in all things. As Plato suggested, "For he (or she) who would proceed aright . . . should begin in youth to visit beautiful forms . . . out of that he should create fair thoughts; and soon he will of himself perceive that the beauty of one form is akin to the beauty of another, and that beauty in every form is one and the same."
- Create models of excellence in every area of your life: relationships, career, finances, service, hobbies, etc.
- Visualize your goals in life and make sure they all fit together.

- Seek information for improvement in all areas of your life. Ask colleagues, bosses, friends, relatives, coaches, and children for constructive feedback.
- If you want to strengthen the vividness of your multisensory visualization, try the following: Picture your favorite scene—enjoy some deep full breaths and then close your eyes. Create a picture of your favorite place. Perhaps, for example, you choose a beach. In your mind's eye look out at the vast expanse of the blue-green ocean and enjoy the foamy white wavecrests. Listen to the sound of the surf and feel the rays of the sun on your back. Breathe in the invigorating smell of the salty air and feel the texture of the sand underfoot. Follow the soaring flight path of a white gull against the clear blue sky. Pick up a handful of sand and let it fall through your fingers, watching the light dance off the crystals. Continue enjoying your visit to your favorite place, relishing every delightful detail!
- Try the fruition exercise: Assemble as many of the following fruits as you can: a red apple, an orange, a lemon, a bunch of green and/or purple grapes, a handful of blueberries. Place them on a table in front of you and sit quietly for a few moments, following the flow of your breathing to help you relax. Then, look at the apple carefully, studying its shape and color for about thirty seconds. Now, close your eyes and re-create this image in your mind's eye. Do the same with each of the fruits in turn. Then repeat the exercise, only this time hold the apple in your hands as you study it. Inhale its aroma and take a big bite. Bring your full attention to the taste, smell, and texture of your juicy apple. When you have swallowed your bite, close your eyes and see the apple, enjoying all the luscious multisen-

sory associations. After you have sampled each fruit (don't take a big bite of your lemon, a little nibble will do the trick), picture each one in your mind's eye. Then, in your imagination, create a picture of each fruit magnified 100 times. Shrink the fruits back to regular size and imagine viewing them from different angles. Then imagine the fruits dancing in the juggler's box in front of you.

