# THE LITTLE BOOK of TALENT

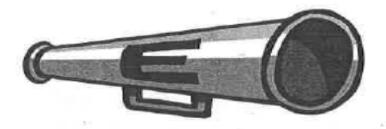


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THE TALENT CODE

- To learn a new move exaggerate it
- Give a new skill a minimum of eight weeks
- Be willing to be stupid



### TIP #31 TO LEARN A NEW MOVE, EXAGGERATE IT

Think of the way parents teach their babies new words—they stretch out each sound, overemphasize it, overdo it. There's a good reason for this. Going too far helps us understand where the boundaries are.

To learn a new move, exaggerate it. If the move calls for you to lift your knees, lift them to the ceiling. If it calls for you to press hard on the guitar strings, press with all your might. If it calls for you to emphasize a point while speaking in public, emphasize with theatricality. Don't be halfhearted. You can always dial back later. Go too far so you can feel the outer edges of the move, and then work on building the skill with precision.



### TIP #48 GIVE A NEW SKILL A MINIMUM OF EIGHT WEEKS

When it comes to growing new skills, eight weeks seems to be an important threshold. It's the length of many top-level training programs around the world, from the Navy SEALs' physical-conditioning program to the Meadowmount School of Music program to the clinics of the Bolshoi Ballet to the mission training for the Mercury astronauts. A recent study at Massachusetts General Hospital showed that practicing meditation for twenty-seven minutes a day created lasting brain changes in (you guessed it) eight weeks.

Of course, this doesn't mean that you can be proficient in any skill in eight weeks. Rather, it underlines two more basic points: 1) Constructing and honing neural circuitry takes time, no matter who you are; and

2) Resilience and grit are vital tools, particularly in the early phases of learning. Don't make judgments too early. Keep at it, even if you don't feel immediate improvement. Give your talent (that is, your brain) the time it needs to grow.



### TIP #5 BE WILLING TO BE STUPID

Teammates of the hockey star Wayne Gretzky would occasionally witness a strange sight: Gretzky falling while he skated through solitary drills on the ice. While the spectacle of the planet's greatest hockey player toppling over like a grade-schooler might seem surprising, it actually makes perfect sense. As skilled as he was, Gretzky was determined to improve, to push the boundaries of the possible. The only way that happens is to build new connections in the brain—which means reaching, failing, and, yes, looking stupid.

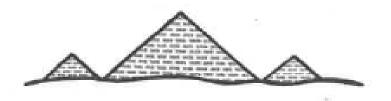
Feeling stupid is no fun. But being willing to be stupid—in other words, being willing to risk the emotional pain of making mistakes—is absolutely essential, because reaching, failing, and reaching again is the way your brain grows and forms new connections. When it comes to developing talent, remember, mistakes are not really mistakes—they are the guideposts you use to get better.

One way some places encourage "productive mistakes" is to establish rules that encourage people to make reaches that might otherwise feel strange and risky—in effect, nudging them into the sweet spot at the edge of their ability (see Tip #13). For example, students at the Meadowmount School of Music often practice according to an informal rule: If a passerby can recognize a song, it's being played too fast. The point of this super-exaggerated slowness (which produces songs that resemble those of humpback whales) is to reveal small mistakes that might have gone undetected, and thus create more high-quality reaches.

Businesses do it too. Google offers "20-percent time": Engineers are given 20 percent of their work time to spend on private, nonapproved projects they are passionate about, and thus ones for which they are more likely to take risks. I've encountered numerous organizations that have employees sign a "contract" affirming that they will take risks and make mistakes. Living-Social, the Washington, D.C., e-commerce company, has a rule of thumb for employees: Once a week, you should make a decision at work that scares you.

Whatever the strategy, the goal is always the same: to encourage reaching, and to reinterpret mistakes so that they're not verdicts, but the information you use to navigate to the correct move.

- Embrace repetition
- Have a blue-collar mindset
- "Think like a gardener, work like a carpenter"



### TIP #43 EMBRACE REPETITION

Repetition has a bad reputation. We tend to think of it as dull and uninspiring. But this perception is titanically wrong. Repetition is the single most powerful lever we have to improve our skills, because it uses the built-in mechanism for making the wires of our brains faster and more accurate (see the Appendix, page 117).

When U.S. Navy SEAL Team 6 mounted its May 2011 raid on Osama bin Laden's compound in Pakistan, it prepared by constructing full-scale replicas of the compound in North Carolina and Nevada, and rehearsing for three weeks. Dozens of times the SEALs simulated the operation. Dozens of times, they created various conditions they might encounter. They used the power of repetition to build the circuitry needed for the job.

Another example: Moe Norman was a shy Canadian who played briefly on the professional golf tour in the 1960s and '70s. He was also, in most estimations, the most accurate golfer in history. Norman shot seventeen holes in one, three scores of 59, and, in Tiger Woods's estimation, ranked as one of two golfers in history who "owned their swing" (the other was Ben Hogan). Norman was also a likely autistic who, at a young age, became enraptured by the power of repetition. From the age of sixteen onward, Norman hit eight hundred to a thousand balls a day, five days a week; calluses grew so thick on his hands he had to pare them with a knife. Because of his emotional struggles, Norman had difficulty competing in tournaments. But at a demonstration in 1995, he hit fifteen hundred drives in a row, all of them landing within fifteen yards of each other. As Woods put it, Norman "woke up every day and knew he was going to hit it well. Every day. It's frightening how straight he hits it."

Embracing repetition means changing your mindset; instead of viewing it as a chore, view it as your most powerful tool. As the martial artist and actor Bruce Lee said, "I fear not the man who has practiced ten thousand kicks once, but I fear the man who has practiced one kick ten thousand times."



TIP #44

HAVE A BLUE-COLLAR MIND-SET

From a distance, top performers seem to live charmed, cushy lives. When you look closer, however, you'll find that they spend vast portions of their life intensively practicing their craft. Their mind-set is not entitled or arrogant; it's 100-percent blue collar: They get up in the morning and go to work every day, whether they feel like it or not.

As the artist Chuck Close says, "Inspiration is for amateurs."



## TIP #52 "THINK LIKE A GARDENER, WORK LIKE A CARPENTER"

We all want to improve our skills quickly—today, if not sooner. But the truth is, talent grows slowly. You would not criticize a seedling because it was not yet a tall oak tree; nor should you get upset because your skill circuitry is in the growth stage. Instead, build it with daily deep practice.

To do this, it helps to "think like a gardener and work like a carpenter." I heard this saying at Spartak. Think patiently, without judgment. Work steadily, strategically, knowing that each piece connects to a larger whole.

- Stare at who you want to become
- Steal without apology
- Don't fall for the prodigy myth



### TIP #1 STARE AT WHO YOU WANT TO BECOME

If you were to visit a dozen talent hotbeds tomorrow, you would be struck by how much time the learners spend observing top performers. When I say "observing," I'm not talking about passively watching. I'm talking about staring—the kind of raw, unblinking, intensely absorbed gazes you see in hungry cats or newborn babies.

We each live with a "windshield" of people in front of us; one of the keys to igniting your motivation is to fill your windshield with vivid images of your future self, and to stare at them every day. Studies show that even a brief connection with a role model can vastly increase unconscious motivation. For example, being told that you share a birthday with a mathematician can improve the amount of effort you're willing to put into difficult math tasks by 62 percent.

Many talent hotbeds are fueled by the windshield

phenomenon. In 1997, there were no South Korean golfers on the Ladies Professional Golf Association (LPGA) Tour. Today there are more than forty, winning one-third of all events. What happened? One golfer succeeded (Se Ri Pak, who won two major tournaments in 1998), and, through her, hundreds of South Korean girls were ignited by a new vision of their future selves. As the South Korean golfer Christina Kim put it, "You say to yourself, 'If she can do it, why can't I?'"

Windshields apply equally well to adults. The 5th Special Forces Group of the Green Berets recently started a leadership-training program in which soldiers spent several weeks in the executive offices of General Electric. The soldiers went to the office each morning and accompanied the execs throughout their workday, with no responsibilities other than to simply observe. And when the soldiers returned to their unit, the commanders noticed a significant boost in performance, communication, and leadership. "It was definitely a success," said Lieutenant Colonel Dean Franks, the 5th Group's battalion commander. "We're planning to do a lot more of this in the future."

Think of your windshield as an energy source for your brain. Use pictures (the walls of many talent hotbeds are cluttered with photos and posters of their stars) or, better, video. One idea: Bookmark a few YouTube videos, and watch them before you practice, or at night before you go to bed.



### TIP #3

We are often told that talented people acquire their skill by following their "natural instincts." This sounds nice, but in fact it is baloney. All improvement is about absorbing and applying new information, and the best source of information is top performers. So steal it.

Stealing has a long tradition in art, sports, and design, where it often goes by the name of "influence." The young Steve Jobs stole the idea for the computer mouse and drop-down menus from the Xerox Palo Alto Research Center. The young Beatles stole the high "wooooo" sounds in "She Loves You," "From Me to You," and "Twist and Shout" from their idol Little Richard. The young Babe Ruth based his swing on the mighty uppercut of his hero, Shoeless Joe Jackson. As Pablo Picasso (no slouch at theft himself) put it, "Good artists borrow. Great artists steal."

Linda Septien, founder of the Septien School of

Contemporary Music, a hotbed near Dallas that has produced millions of dollars in pop-music talent (including Demi Lovato, Ryan Cabrera, and Jessica Simpson), tells her students, "Sweetheart, you gotta steal like crazy. Look at every single performer better than you and see what they've got that you can use. Then make it your own." Septien follows her own advice, having accumulated fourteen three-ring notebooks' worth of ideas stolen from top performers. In plastic sleeves inside the binders, in some cases scribbled on cocktail napkins, reside tips on everything from how to hit a high note to how to deal with a rowdy crowd (a joke works best).

Stealing helps shed light on some mysterious patterns of talent—for instance, why the younger members of musical families so often are also the most talented. (A partial list: The Bee Gees's younger brother, Andy Gibb; Michael Jackson; the youngest Jonas Brother, Nick. Not to mention Mozart, J. S. Bach, and Yo-Yo Ma, all babies of their families.) The difference can be explained partly by the windshield phenomenon (see Tip #1) and partly by theft. As they grow up, the younger kids have more access to good information. They have far more opportunity to watch their older siblings perform, to mimic, to see what works and what doesn't. In other words, to steal.

When you steal, focus on specifics, not general impressions. Capture concrete facts: the angle of a golfer's left elbow at the top of the backswing; the curve of a surgeon's wrist; the precise shape and tension of a singer's lips as he hits that high note; the exact length of time a comedian pauses before delivering the punch line. Ask yourself:

- What, exactly, are the critical moves here?
- How do they perform those moves differently than I do?



### TIP #11 DON'T FALL FOR THE PRODIGY MYTH

Most of us grow up being taught that talent is an inheritance, like brown hair or blue eyes. Therefore, we presume that the surest sign of talent is early, instant, effortless success, i.e., being a prodigy. In fact, a wellestablished body of research shows that that assumption is false. Early success turns out to be a weak predictor of long-term success.

Many top performers are overlooked early on, then grow quietly into stars. This list includes Michael Jordan (cut from his high school varsity team as a sophomore), Charles Darwin (considered slow and ordinary by teachers), Walt Disney (fired from an early job because he "lacked imagination"), Albert Einstein, Louis Pasteur, Paul Gauguin, Thomas Edison, Leo Tolstoy, Fred Astaire, Winston Churchill, Lucille Ball, and so on. One theory, put forth by Dr. Carol Dweck of Stanford University, is that the praise and attention prodi-

gies receive lead them to instinctively protect their "magical" status by taking fewer risks, which eventually slows their learning.

The talent hotbeds are not built on identifying talent, but on constructing it, day by day. They are not overly impressed by precociousness and do not pretend to know who will succeed. While I was visiting the U.S. Olympic Training Center at Colorado Springs, I asked a roomful of fifty experienced coaches this question: Could they accurately assess a top fifteen-year-old's chances of winning a medal in Games two years from then? Only one coach raised his hand.\*

Anson Dorrance, the head coach of the University of North Carolina women's soccer team, which he has led to twenty-one national championship wins, sums this up nicely. "One of the most unfortunate things I see when identifying youth players is the girl who is told over the years how great she is. By the time she's a high school freshman, she starts to believe it. By her senior year, she's fizzled out. Then there's her counterpart: a girl waiting in the wings, who quietly and with determination decides she's going to make something of herself. Invariably, this humble, hardworking girl is the one who becomes the real player."

If you have early success, do your best to ignore the

praise and keep pushing yourself to the edges of your ability, where improvement happens. If you don't have early success, don't quit. Instead, treat your early efforts as experiments, not as verdicts. Remember, this is a marathon, not a sprint.

Make positive reaches



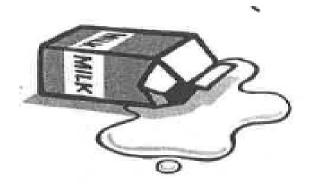
TIP #32

MAKE POSITIVE REACHES

There's a moment just before every rep when you are faced with a choice: You can either focus your attention on the target (what you want to do) or you can focus on the possible mistake (what you want to avoid). This tip is simple: Always focus on the positive move, not the negative one.

For example, a golfer lining up a putt should tell herself, "Center the stroke," not "Don't pull this putt to the left." A violinist faced with a difficult passage should tell himself, "Nail that A-flat," not "Oh boy, I hope I don't miss that A-flat." Psychologists call this "positive framing," and provide plentiful theories of how framing affects our subconscious mind. The point is, it always works better to reach for what you want to accomplish, not away from what you want to avoid.

- Pay attention immediately after you make a mistake
- Practice immediately after performance



### TIP #22 PAY ATTENTION IMMEDIATELY AFTER YOU MAKE A MISTAKE

Most of us are allergic to mistakes. When we make one, our every instinct urges us to look away, ignore it, and pretend it didn't happen. This is not good, because as we've seen, mistakes are our guideposts for improvement. Brain-scan studies reveal a vital instant, 0.25 seconds after a mistake is made, in which people do one of two things—they look hard at the mistake or they ignore it. People who pay deeper attention to an error learn significantly more than those who ignore it.

Develop the habit of attending to your errors right away. Don't wince, don't close your eyes; look straight at them and see what really happened, and ask yourself what you can do next to improve. Take mistakes seriously, but never personally.



### TIP #39 PRACTICE IMMEDIATELY AFTER PERFORMANCE

The previous tip was about the importance of practicing when you're fresh. This tip is about a different kind of freshness, which comes in the moment just after a performance, game, or competition. At that moment, practicing is probably the last thing you want to do. But it's the first thing you should do, if you're not too worn out, because it helps you target your weak points and fix them. As the golfer Jack Nicklaus said, "I always achieve my most productive practice after an actual round. Then, the mistakes are fresh in my mind and I can go to the practice tee and work specifically on those mistakes."

- Break every move down into chunks



### TIP #15 BREAK EVERY MOVE DOWN INTO CHUNKS

From the time we're small, we hear this good advice from our parents and teachers: Take it a little bit at a time. This advice works because it accurately reflects the way our brains learn. Every skill is built out of smaller pieces—what scientists call chunks.

Chunks are to skill what letters of the alphabet are to language. Alone, each is nearly useless, but when combined into bigger chunks (words), and when those chunks are combined into still bigger things (sentences, paragraphs), they can build something complex and beautiful.

To begin chunking, first engrave the blueprint of the skill on your mind (see Tip #2). Then ask yourself:

- What is the smallest single element of this skill that I can master?
- 2) What other chunks link to that chunk?

Practice one chunk by itself until you've mastered it—then connect more chunks, one by one, exactly as you would combine letters to form a word. Then combine those chunks into still bigger chunks. And so on.

Musicians at Meadowmount cut apart musical scores with scissors and put the pieces in a hat, then pull each section out at random. Then, after the chunks are learned separately, they start combining them in the correct order, like so many puzzle pieces. "It works because the students aren't just playing the music on autopilot—they're thinking," says one of the school's violin instructors, Skye Carman.

No matter what skill you set out to learn, the pattern is always the same: See the whole thing. Break it down to its simplest elements. Put it back together. Repeat.

- Embrace struggle
- Cultivate your grit



TIP #17
EMBRACE STRUGGLE

At all of the talent hotbeds, from Moscow to Dallas to Brazil to New York, I saw the same facial expression: eyes narrow, jaw tight, nostrils flared, the face of someone intently reaching for something, falling short, and reaching again. This is not a coincidence. Deep practice has a telltale emotional flavor, a feeling that can be summed up in one word: "struggle."

Most of us instinctively avoid struggle, because it's uncomfortable. It feels like failure. However, when it comes to developing your talent, struggle isn't an option—it's a biological necessity. This might sound strange, but it's the way evolution has built us. The struggle and frustration you feel at the edges of your abilities—that uncomfortable burn of "almost, almost"—is the sensation of constructing new neural connections, a phenomenon that the UCLA psychologist Robert Bjork calls "desirable difficulty." Your brain works just like your muscles: no pain, no gain.



### TIP #50

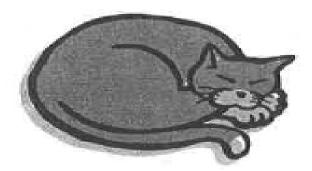
Grit is that mix of passion, perseverance, and selfdiscipline that keeps us moving forward in spite of obstacles. It's not flashy, and that's precisely the point. In a world in which we're frequently distracted by sparkly displays of skill, grit makes the difference in the long run.

Recently, a University of Pennsylvania researcher named Angela Duckworth measured the influence of grit on twelve hundred first-year West Point cadets before they began a brutal summer training course called the Beast Barracks. Before the course began, she gave the cadets a brief test: seventeen questions that asked them to rate their own ability to stick to goals, to be motivated by failure, and to persist in the face of obstacles. It turned out that this test—which took about two minutes to complete—was uncannily accurate at predicting whether or not a cadet succeeded, far exceed-

ing West Point's complex set of predictive criteria, including IQ, psychological test results, grade-point average, and physical fitness. The grit test has since been used to predict success in schools, business, and a variety of other settings.

Grit isn't inborn. It's developed, like a muscle, and that development starts with awareness. To take Duckworth's test, do a computer search for "Grit Survey" (or go directly to www.authentichappiness.sas.upenn.edu/tests/SameAnswers/t.aspx?id=1246). Take the test and use your score as a way to reflect on the role of this quality in your life. For instance, when you hit an obstacle, how do you react? Do you tend to focus on a long-term goal, or move from interest to interest? What are you seeking in the long run? Begin to pay attention to places in your life where you've got grit, and celebrate them in yourself and others.

- Take a nap
- Just before sleep, watch a mental movie



TIP #30

This is one of my favorite tips. Napping is common in talent hotbeds, and features both anecdotal and scientific justification.

The anecdotal: Albert Einstein was good at physics, and he was really good at his daily post-lunch twenty-minute snooze. Other famous nappers include Leonardo da Vinci, Napoleon Bonaparte, Winston Churchill, Thomas Edison, Ronald Reagan, John F. Kennedy, and John D. Rockefeller. Spend time with any professional athletic team, and you'll find that they're also professional nappers.

The science: Napping is good for the learning brain, because it helps strengthen the connections formed during practice and prepare the brain for the next session. Researchers at the University of California, Berkeley, found that napping for ninety minutes improved memory scores by 10 percent, while skipping a nap made them decline by 10 percent. "You need sleep before learning, to prepare your brain, like a dry sponge, to absorb new information," said the study's lead investigator, Dr. Matthew Walker.



TIP #40

JUST BEFORE SLEEP,

WATCH A MENTAL MOVIE

This is a useful habit I've heard about from dozens of top performers, ranging from surgeons to athletes to comedians. Just before falling asleep, they play a movie of their idealized performance in their heads. A wide body of research supports this idea, linking visualization to improved performance, motivation, mental toughness, and confidence. Treat it as a way to rev the engine of your unconscious mind, so it spends more time churning toward your goals.

- Honor the hard skills



### TIP #10 HONOR THE HARD SKILLS

As you probably recognize, most talents are not exclusively hard skills or soft skills, but rather a combination of the two. For example, think of a violinist's precise finger placement to play a series of notes (a hard skill) and her ability to interpret the emotion of a song (a soft skill). Or a quarterback's ability to deliver an accurate spiral (a hard skill) and his ability to swiftly read a defense (a soft skill).

The point of this tip is simple: Prioritize the hard skills because in the long run they're more important to your talent. At Spartak, the Moscow tennis club, there is a rule that young players must wait years before entering competitive tournaments. "Technique is everything," said a coach, Larisa Preobrazhenskaya. "If you begin playing without technique it is big mistake."

You might be surprised to learn that many top performers place great importance on practicing the same skills they practiced as beginners. The cellist Yo-Yo Ma spends the first minutes of every practice playing single notes on his cello. The NFL quarterback Peyton Manning spends the first segment of every practice doing basic footwork drills—the kind they teach twelve-year-olds. These performers don't say to themselves, "Hey, I'm one of the most talented people in the world—shouldn't I be doing something more challenging?" They resist the temptation of complexity and work on the task of honing and maintaining their hard skills, because those form—quite literally—the foundation of everything else.

One way to keep this idea in mind is to picture your talent as a big oak tree—a massive, thick trunk of hard skills with a towering canopy of flexible soft skills up above. First build the trunk. Then work on the branches.

- Keep your big goals secret



TIP #51
KEEP YOUR BIG GOALS SECRET

While it's natural and oh so tempting to want to announce big goals, it's smarter to keep them to yourself. In a 2009 experiment at New York University, 163 subjects were given a difficult work project and forty-five minutes to spend on it. Half the subjects were told to announce their goals, while half were told to keep quiet. The subjects who announced their goals quit after only an average of thirty-three minutes, and reported feeling satisfied with their work. Those who kept their mouths shut, however, worked the entire forty-five minutes, and remained strongly motivated. (In fact, when the experiment ended, they wanted to keep working.)

Telling others about your big goals makes them less likely to happen, because it creates an unconscious payoff—tricking our brains into thinking we've already accomplished the goal. Keeping our big goals to ourselves is one of the smartest goals we can set.

- To learn a new move exaggerate it
- Give a new skill a minimum of eight weeks
  - Be willing to be stupid

### Week #2

- Embrace repetition
- Have a blue-collar mindset
- "Think like a gardener, work like a carpenter"

### Week #3

- Stare at who you want to become
  - Steal without apology
  - Don't fall for the prodigy myth

### Week #4

- Make positive reaches

### Week #5

- Pay attention immediately after you make a mistake
  - Practice immediately after performance

### Week #6

Break every move down into chunks

### Week #7

- Embrace struggle
- Cultivate your grit

### Week #8

- Take a nap
- Just before sleep, watch a mental movie

### Week #9

- Honor the hard skills

### Week #10

- Keep your big goals secret