

The Little Book of Talent: 52 Tips for Improving Your Skills (Daniel Coyle)

Small actions, repeated over time, transform us. As the master vocal coach Linda Septien put it, “This ain’t magic, and it ain’t rocket science. It’s about working hard, and working smart.”

Each day, each practice session, is a step toward a different future. This is a hopeful idea, and the most hopeful thing about it is that it is a fact.

Talent begins with brief, powerful encounters that spark motivation by linking your identity to a high-performing person or group. This is called ignition, and it consists of a tiny, world-shifting thought lighting up your unconscious mind: I could be them.

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.

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.

The key to effective engraving is to create an intense connection: to watch and listen so closely that you can imagine the feeling of performing the skill.

All improvement is about absorbing and applying new information, and the best source of information is top performers. So steal it.

As Pablo Picasso (no slouch at theft himself) put it, “Good artists borrow. Great artists steal.”

A high percentage of top performers keeps some form of daily performance journal.

What matters is that you write stuff down and reflect on it. Results from today. Ideas for tomorrow. Goals for next week. A notebook works like a map: It creates clarity.

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.

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.

Which is a shame, because luxury is a motivational narcotic: It signals our unconscious minds to give less effort. It whispers, Relax, you've made it.

The point of this tip is not moral; it's neural. Simple, humble spaces help focus attention on the deep-practice task at hand: reaching and repeating and struggling.

Precision especially matters early on, because the first reps establish the pathways for the future. Neurologists call this the “sled on a snowy hill” phenomenon. The first repetitions are like the first sled tracks on fresh snow: On subsequent tries, your sled will tend to follow those grooves. “Our brains are good at building connections,” says Dr. George Bartzokis, a neurologist at UCLA. “They're not so good at unbuilding them.”

While hard skills are best put together with measured precision (see Tip #8), soft skills are built by playing and exploring inside challenging, ever-changing environments. These are places where you encounter different obstacles and respond to them over and over, building the network of sensitive wiring you need to read, recognize, and react.

to build soft skills you should behave less like a careful carpenter and more like a skateboarder in a skateboard park: aggressive, curious, and experimental, always seeking new ways to challenge yourself.

When you practice a soft skill, focus on making a high number of varied reps, and on getting clear feedback. Don't worry too much about making errors—the important thing is to explore. Soft skills are often more fun to practice, but they're also tougher because they demand that you coach yourself. After each session ask yourself, What worked? What didn't? And why?

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,

“If you begin playing without technique it is big mistake.”

The NFL quarterback Peyton Manning spends the first segment of every practice doing basic footwork drills—the kind they teach twelve-year-olds.

Early success turns out to be a weak predictor

One theory, put forth by Dr. Carol Dweck of Stanford University, is that the praise and attention prodigies receive lead them to instinctively protect their “magical” status by taking fewer risks, which eventually slows their learning.

Instead, treat your early efforts as experiments, not as verdicts. Remember, this is a marathon, not a sprint.

Great teachers are first and foremost learners, who improve their skills with each passing year.

People in the hotbeds have a different relationship with practicing.

But in the talent hotbeds I visited, practice was the big game, the center of their world, the main focus of their daily lives. This approach succeeds because over time, practice is transformative, if it's the right kind of practice. Deep practice.

The key to deep practice is to reach. This means to stretch yourself slightly beyond your current ability, spending time in the zone of difficulty called the

sweet spot. It means embracing the power of repetition, so the action becomes fast and automatic.

Deep practice is not measured in minutes or hours, but in the number of high-quality reaches and repetitions you make—basically, how many new connections you form in your brain.

Instead of counting minutes or hours, count reaches and reps. Instead of saying, “I’m going to practice piano for twenty minutes,” tell yourself, “I’m going to do five intensive reps of that new song.” Instead of planning to hit golf balls for an hour, plan to make twenty-five quality swings with each club.

But the real goal isn’t practice; it’s progress. As John Wooden put it, “Never mistake mere activity for accomplishment.”

One useful method is to set a daily SAP: smallest achievable perfection. In this technique, you pick a single chunk that you can perfect—not just improve, not just “work on,” but get 100 percent consistently correct.

The point is to take the time to aim at a small, defined target, and then put all your effort toward hitting it.

“Don’t look for the big, quick improvement. Seek the small improvement one day at a time. That’s the only way it happens—and when it happens, it lasts.”

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.

With deep practice, small daily practice “snacks” are more effective than once-a-week practice binges. The reason has to do with the way our brains grow—incrementally, a little each day, even as we sleep. Daily practice, even for five minutes, nourishes this process, while more occasional practice forces your brain to play catch-up.

The other advantage of practicing daily is that it becomes a habit. The act of practicing—making time to do it, doing it well—can be thought of as a skill in itself, perhaps the most important skill of all.

The term “drill” evokes a sense of drudgery and meaninglessness. It’s mechanical, repetitive, and boring—as the saying goes, drill and kill. Games, on the other hand, are precisely the opposite. They mean fun, connectedness, and passion.

Good coaches share a knack for transforming the most mundane activities—especially the most mundane activities—into games.

Solo practice works because it’s the best way to 1) seek out the sweet spot at the edge of your ability, and 2) develop discipline, because it doesn’t depend on others.

The world-class performers spent five times as many hours practicing alone.

As the North Carolina women’s soccer coach Anson Dorrance said, “The vision of a champion is someone who is bent over, drenched in sweat, at the point of exhaustion, when no one else is

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

Every time you practice deeply—the wires of your brain get faster. Over time, signal speeds increase to 200 mph from 2 mph.

Smaller practice spaces can deepen practice when they are used to increase the number and intensity of the reps and clarify the goal.

When we learn how to do something new, our immediate urge is to do it again, faster. This is known as the Hey, Look at Me! reflex. This urge for speed makes perfect sense, but it can also create sloppiness, particularly when it comes to hard skills (see Tip #8). We trade precision—and long-term performance—for a temporary thrill. So, slow it down.

As the saying goes, “It’s not how fast you can do it. It’s how slowly you can do it correctly.”

One of the quickest ways to deepen practice is also one of the simplest: Close your eyes.

The reason, in each case, is the same. Closing your eyes is a swift way to nudge you to the edges of your ability, to get you into your sweet spot. It sweeps away distraction and engages your other senses to provide new feedback.

Memorize the feeling, the rhythm, the physical and mental sensations. The point is to mark this moment—this is the spot where you want to go again and again.

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.

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.

To learn a new move, exaggerate it. If the move calls for you to lift your knees, lift them to the ceiling.

Go too far so you can feel the outer edges of the move, and then work on building the skill with precision.

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.”

On the other hand, closing the book and writing a summary forces you to figure out the key points (one set of reaches), process and organize those ideas so they make sense (more reaches), and write them on the page (still more reaches, along with repetition).

He discovered that our brains make stronger connections when they're stimulated three times with a rest period of ten minutes between each stimulation. The real-world translation: To learn something most effectively, practice it three times, with ten-minute breaks between each rep.

ELEMENT 1: REACHING AND REPEATING. Does the practice have you operating on the edge of your ability, reaching and repeating?

ELEMENT 2: ENGAGEMENT. Is the practice immersive? Does it command your attention? Does it use emotion to propel you toward a goal?

- Trumpeter B tries to play the passage perfectly—with zero mistakes—five times in a row. If she makes any mistake, the count goes back to zero and she starts over.

Result: Student B made the better choice, because the method is more engaging. Playing a passage twenty times in a row is boring, a chore where you're simply counting the reps until you're done. But playing five times perfectly, when any mistake sends you back to zero, is intensively engaging.

ELEMENT 3: PURPOSEFULNESS. Does the task directly connect to the skill you want to build?

ELEMENT 4: STRONG, SPEEDY FEEDBACK. Does the learner receive a stream of accurate information about his performance—where he succeeded and where he made mistakes?

Exhaustion is the enemy. Fatigue slows brains. It triggers errors, lessens concentration, and leads to shortcuts that create bad habits. It's no coincidence that most talent hotbeds put a premium on practicing when people are fresh, usually in the morning, if possible.

Effective teaching is built on trust, and when it comes to trust, we humans are consistent: We decide if we're going to trust someone in the first few seconds of the interaction. This is why good teachers use the first few seconds to connect on an emotional level, especially on the first encounter.

They don't give long speeches; they deliver useful information in small, vivid chunks.

The question is, what vivid, concise message can you deliver right now that will guide her toward making the right reach?

One of the most common mistakes teachers and coaches make is using mushy, imprecise language.

Communicate with precise nouns and numbers—things you can see and touch and measure—and avoid adjectives and adverbs, which don't tell you precisely what to do.

Reachfulness is the essence of learning. It happens when the learner is leaning forward, stretching, struggling, and improving. The point of this rule is that good teachers/coaches/mentors find ways to design environments that tip people away from passivity and toward reachful action. This is why good sports coaches will avoid activities where players stand in lines, waiting their turn, and instead employ lots of small, intense games.

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

Their mindset 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. Inspiration is for amateurs.

Games and contest can slow skill development for four reasons. The presence of other people diminishes an appetite for risks, nudging you away from the sweet spot. Games can reduce the number of quality reps. The pressure of games distorts priorities, encouraging shortcuts in technique. Games encourage players,

coaches, and parents to judge success by the scoreboard rather than by how much was learned.

A five to one ratio of practice time to performance time is a good starting point.

The older kids teach the younger ones. This works because when you communicate a skill to someone, you come to understand it more deeply yourself. Mixed age groups also provide younger players with models to stare at and nourish empathy in older children. When you see someone struggle, and help them through it, you improve your ability to deal with your own struggles.

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, etc.

Don't make judgments too early. Keep at it, even if you don't feel immediate improvement. Give your talent the time it needs to grow.

The Cambridge Handbook of Expertise and Expert Performance, shows that the best way past a plateau is to jostle yourself beyond it; to change your practice method so you disrupt your autopilot and rebuild a faster, better circuit. One way to do this is to speed things up, to force yourself to do the task faster than you normally would. Or you can slow things down, going so slowly that your highlight previously undetected mistakes. Or you can do the task in reverse order, turn it inside out or upside down. It doesn't matter which technique you use, as long as you find a way to knock yourself out of autopilot and into your sweet spot.

Grit is that mix of passion, perseverance, and self-discipline that keeps us moving forward in spite of obstacles. It's not flashy, and that's precisely the point.

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.authentic happiness.sas.upenn.edu/tests/SameAnswers/t.aspx?id=1246

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.

But the truth is, talent grows slowly.

Think patiently, without judgment. Work Steadily, strategically, knowing that each piece connects to a larger whole.