

The following outline is my notes from reading Daniel Coyle's fantastic book, "Little Book of Talent." [Buy it here](#) and its counterpart, ["The Talent Code: Greatness Isn't Born. It's Grown. Here's How."](#) I HIGHLY recommend both!!

Little Book of Talent

52 Tips for Improving Skill : by Daniel Coyle

Part 1: Stare, study, and don't be afraid to be stupid

1. Study the Saxophone Heroes : research artists and study recordings.
 - Talent begins with brief encounters that spark ignition
 - Ignition: motivation process that arises when your identity becomes linked to a long-term vision of your future
 - triggers significant amount of unconscious energy, marked by realization "that is who I want to be"
 - Create spark : I want to be like that
 - Create deep practice
 - Deep/deliberate practice: willingness to operate on the edge of your ability, aiming for targets that are just out of reach
2. Stare at people who are better than you/who you want to emulate
 - Visualize your future self : if he/she can do it, why can't I?
 - Bookmark a few YouTube videos and watch them before practicing or before bed
3. Engrave: watch/listen to/study the specific thing you want to learn so closely that you can feel it/simulate it in your mind
 - Spend 15 minutes per day engraving. Intently watch the skill being performed over and over until you have a mental picture of it
 - This can also be done with listening
 - the key is to create an intense connection, so much so that you can envision the movement / sound
4. Steal without apology!! Absorb and apply new information from top performers
5. In your practice log: write goal for the week, thoughts from the day, ideas for tomorrow. (what worked, what didn't, why?)
6. Be willing to be stupid
 - Don't fear making an error! You have to push boundaries that seem impossible in order to improve.
 - Mistakes are guideposts. Reach, fail, and reach again.
7. Create high-quality reaches by taking risks

8. Make shallow practice the enemy
 - Shallow Practice: marked by lack of intensity, vagueness of goals and or/unwillingness to reach beyond current abilities
 - often caused by aversion to making mistakes
 - results in vastly slowed skill acquisition and learning
9. Play glacially slow: listen/feel every single movement. Goal: encourage reaching, reinterpret mistakes as information you can use to make the correct move
10. *Hard Skill*: precise, consistent, one path, specialized physical pursuits (eg, scale pattern).
 - Reliable, exact, automatic
 - *ABC: Always Be Consistent*
11. *Soft Skill*: high-flexibility, agile, many paths to a good result
 - *RRR: Read, recognize, and react*
12. How to build hard skills: work like a careful carpenter. Careful, slow, keenly attuned to errors. Go slowly, make one simple move at a time, immediately fix errors
13. How to build soft skills: work like a skateboarder. Build by playing and exploring in a challenging, ever-changing environment. Aggressive, curious, experimental. Always seek ways to challenge yourself. This requires you to be clumsy for a long time
14. Never be comfortable with minimum effort
15. Be action-oriented and honest with yourself. Even if the truth stings, it is information you can use to get better
16. Approach problems with short, clear direction
17. Love practicing fundamentals!!! Nurture your core skills

Part 2: Find the sweet spot, then reach!

18. Sweet spot: right at the edge of ability where you learn best and fastest.
 - marked by the frequency of mistakes, but also by recognition of those mistakes
 - Three practice zones:
 1. comfort zone : run-throughs are made mindlessly
 - Music is at least 80% accurate (successful)
 2. sweet spot : engage mind, stretch ability, struggle a bit, recognize and fix mistakes
 - 50-80% accurate
 3. panic zone : drowning, panicked, nervous mess
 - less than 50% accurate
19. **Don't measure deep practice in minutes and hours, but count reaches and successful repetitions**

20. Chunking: take a little bit at a time (after having built a blueprint in your mind).
 - example : Cut apart scores and practice individual parts, then piece them together.
 - Otherwise, practice can be mindless and routine
21. Build one PERFECT chunk per day
22. Embrace struggle: no pain, no gain. Ruthlessly pursue fixing even the smallest mistakes
23. Don't do drills: play games!!
 - Make the most mundane activities into games
 - ex. count the number of times you play something perfectly, give one point per time.
 - Each day and week, try and earn more points
24. Teach in images, not abstract ideas:
 - ex: decrescendo like a balloon running out of air
 - ex: articulate like the reed is hot
25. Mistakes aren't an allergy. Don't ignore them! Look hard at it, don't wince, **take it seriously but never personally**
26. If someone walking by can tell what you're playing, you're practicing too fast. Practicing slow is like a magnifying glass
27. Close your eyes. Improve body awareness and balance: feel it (and/or mime it)
28. Take a nap
 - take a break from the task, then come back with fresh eyes
29. Learn new things by exaggerating. This also shows your limits: go too far so you can feel outer edges, then dial back
 - ex: when learning to play loud, blast. This way, you find threshold of what is loud/full versus ugly
30. Make positive reaches: tell yourself "center the note," not "oh dear here it comes!!"
31. Close the book: helps you actively learn music, versus passively playing it
32. Use the sandwich technique:
 1. make the correct move
 2. then incorrect move
 3. correct move again
33. Use the 3x10 rule: practice something 3 times with 10 minutes in between each rep
34. Give yourself lots of little tests and make targeted goals.
 - ex: perfect playing equals a sticker, cash, chocolate, etc.
 - Helps make practice fun, quick, and repeatable to help track progress
35. Choose a practice strategy: REPS
 - R: reaching and repeating
 - Engagement (5x in a row perfectly, restarting when a mistake is made, better than 20x)

Purposefulness
Strong, speedy feedback

- 36. Stop before you're exhausted
- 37. Practice immediately after performance: helps target and fix weak points while mistakes are fresh
- 38. Watch a mental movie right before sleep :visualize perfect performance
- 39. End on a positive note: small, sweet reward at the end of practice session
 - ex. play your favorite song, however ridiculous, just for fun

Part 3: Embrace repetition, cultivate grit, keep long-term goals secret

- 40. Embrace repetition: most powerful lever we have to improve our skills.
 - Change your mindset: repetition is not a chore, but a tool
- 41. Have a blue collar mindset: work hard, whether or not you feel like it
- 42. For every hour of competition, spend 5-10 hours practicing
 - Reasons why competition slows development:
 1. Presence of other people discourages risk, nudging you away from sweet spot
 2. Competitions reduce the number of quality reps
 3. Pressure of competition distorts priorities, encouraging shortcuts in technique
 4. Competitions encourage people to judge by the score, not by how much was learned
- 43. Don't break bad habits: build NEW ones (grow myelin)
 - Improve by building new skills with simple, intense, gradually challenging workouts
 - You'll feel clumsy and awkward at first, but it's the only way new habits grow
 - for more on this, read "Power of Habit" by Charles Dugan
- 44. If you want to learn it, teach it
 - teach each other: watch, teach, learn from one another. Pair up with another student
- 45. Give a new skill a minimum of 8 weeks
 - constructing and honing neural circuitry takes time
 - resilience and grit are vital tools
 - Don't make judgements too early. Give your brain the time it needs to grow
- 46. When stuck, make a shift
 - plateaus happen when your brain reaches a level of automaticity (autopilot)
 - jostle yourself beyond it : see practice tips!
- 47. Cultivate grit
 - Grit: mix of passion, endurance, and persistence that keeps us moving forward despite obstacles
 - search online for grit survey: do you focus on long-term or move from interest to interest?

48. Keep your big goals secret

- statistically, telling people big goals makes them less likely to happen
- we need to trick our brains into keeping working

49. Think like a gardener, work like a carpenter

- gardener: think patiently and without judgement
- carpenter: work steadily and strategically, knowing that each piece connects to a larger

-6 ways to be better teacher:

1. Use first 2 seconds to connect on emotional level: before you teach, you have to show you care
2. Short chunks of info: stand alongside, in vivid chunks, to each student
3. No mushy, imprecise language: not "play short", but "tongue like reed is hot"
4. Make scorecard for learning: make 1 point for each perfect repetition (not points for amount of practice)
5. Maximize reach-fulness: design environments where there are lots of small, intense games vs. lecturing. **Change traditional lecture: listen to lectures at home and spend class time struggling with work**
6. Aim to create independent learners