

Talent is NOT the Answer

By Douglas Niedt

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New research shows that to be an exceptional performer has little to do with any innate talent or skill. Exceptional people are not gifted. They are not born geniuses. Exceptional performers are a product of:

1. Deliberate practice
2. Enthusiastic family support or support by a mentor throughout their developing years
3. Study with devoted teachers or coaches

The amount and quality of practice are key factors that determine the level of mastery a person achieves. Consistently and overwhelmingly, the evidence shows that exceptional performers are always made, not born.

The rigorous research examined exceptional performance using scientific methods that are verifiable and reproducible. Most of the research studies are compiled in a 900-page handbook called *The Cambridge Handbook of Expertise and Expert Performance* edited by K. Anders Ericsson. It includes studies by more than 100 leading scientists who studied exceptional performance in many fields including surgery, acting, chess, writing, computer programming, ballet, music, and many others.

Ericsson states:

"The journey to truly superior performance is neither for the faint of heart nor for the impatient. The development of genuine expertise requires struggle, sacrifice, and honest, often painful self-assessment. There are no shortcuts. It will take you at least a decade to achieve expertise, and you will need to invest that time wisely, by engaging in 'deliberate' practice--practice that focuses on tasks that are beyond your current level of competence and comfort. You will need a well-informed coach not only to guide you through deliberate practice but also to help you learn how to coach yourself."

It Takes Deliberate Practice

But, putting in tons of practice doesn't mean you will master the guitar or any field. The practice must be what Ericsson calls *Deliberate Practice*. Deliberate practice is a huge sustained effort to do things you are unable to do well or even not at all.

Most people tend to practice what they already know. Golf champ Sam Snead once said, "It is only human nature to want to practice what you can already do well, since it's a hell of a lot less work and a hell of a lot more fun."

Only by long-term work trying to do what you *can't* do will you become a master guitarist or expert in your field. You must work continually--hours every day for all your life to eliminate specific weaknesses. It must be focused practice.

The word "deliberate" cannot be emphasized enough. Practicing mindlessly on autopilot will not produce mastery. For you, the musician, mastery is not the result so much of how many hours you practice and exercise the fingers. What matters is how many hours you practice with your head. Research shows that very few experts, including musicians, writers, and athletes can engage in highly focused deliberate practice for more than four to five hours at a time.

As Sam Snead pointed out, it is very easy to neglect deliberate practice. Even master performers who reach high levels of performance may begin to rely on intuition and respond by habit to specific situations. This can cause problems when they encounter new challenges because they can lose their ability to analyze the problem and fix it with the required new solutions. But research has shown that musicians over 60 years old who continue deliberate practice for about ten hours a week can match the speed and technical skills of expert musicians in their twenties when tested on their ability play an unfamiliar piece of music.

It Takes 10,000+ Hours (Even for Mozart)

Ericsson's research shows that even the most gifted performers need a minimum of ten years or 10,000 hours of *intense training* to achieve mastery in their field. He says (and I absolutely concur) that in music and some other fields, the "apprenticeship" is longer. "It now takes most elite musicians 15 to 25 years of steady practice, on average, before they succeed at the international level." That translates to 15,000 to 25,000 hours of practice.

Ericsson and his colleagues found no exceptions to the 10,000 rule. There weren't any "naturals" who practiced less than their peers and still became top performers. In music, the people who reached the top didn't practice somewhat harder than the others. They practiced *thousands* of hours longer than the others.

This finding that there is a critical minimum number of hours of deliberate practice that must be met to achieve mastery in complex tasks surfaces again and again in studies of expertise. Neurologist Daniel Levitin states, "The emerging picture from such studies is that ten thousand hours of practice is required to achieve the level of mastery associated with being a world-class expert--in anything...Of course, this doesn't address why some people get more out of their practice sessions than others do. But no one has yet found a case in which true world-class expertise was accomplished in less time. It seems that it takes the brain this long to assimilate all that it needs to know to achieve true mastery."

Some child prodigies or a chess master like Bobby Fischer are able to beat the ten-year rule by practicing more hours per year. And times are changing. Before the early 20th century, people could reach world-class levels more quickly. In the music world there were not nearly as many performers. And from what we can tell from written accounts, technical execution was not on the level it is today. With the advent of advanced recording technology we now have the expectation of perfect technical execution on CDs which has translated into expecting technical perfection in concert performances as well. The bar has risen significantly since pre-recording days. It is now almost impossible to beat the ten-year 10,000 hour rule. As Malcolm Gladwell puts it in his best-selling book *Outliers* (whose chapter on the 10,000-hour rule is based on Ericsson's research), "Ten thousand hours is the magic number of greatness."

Most people are naïve about the effort and time it takes to become an expert:

After a pianist gave a fabulous concert, a woman ran up to him gushing about how wonderful it was and how "She would give anything to play like that." The pianist looked at her straight in the eye and replied, "Oh no you wouldn't." The woman, somewhat taken aback asserted, "Yes I would." The pianist explained that "I doubt you would practice six hours every day, every day of your life, sacrificing time with friends, family, and your children. I doubt you would spend the rest of your waking hours studying music, listening to it to learn everything about it. I doubt you would maintain my rigorous touring schedule of constant travel and endless hours in motel rooms. I doubt you would enjoy the sometimes crushing criticism of my work when I have an off night." And he went on quite a while longer while the poor woman came to terms with reality.

Leo Tolstoy once mentioned that people often told him they didn't know if they could write a novel because they hadn't tried yet. It irritated him to no end that they thought if they just got started, they too could produce a brilliant novel. After all, everyone writes. Most people have a natural ability or have learned to do it in school. What's the big deal? Equally irritating to me is that this type of person, if they do get around to creating their book or musical composition or if they work on their skill at playing an instrument--will think their work is equal to that of a true master. They are clueless.

Self-help authors tend to promulgate this same type of thinking. They tell their readers they are essentially ready for success and just need to take a few easy steps to turn their lives around.

Except for the flash-in-the-pan here today/gone tomorrow celeb types, researchers unfailingly have found that so-called born geniuses, natural talents, and "overnight successes" spent a lot of time in practice and preparation. They didn't find any exceptions. Remember, the researchers are not talking about people who achieve popular success because of their lifestyle, sexual adventures, and outrageous behavior. They are talking about people who are masters of their skill--true experts.

Let's look at Wolfgang Amadeus Mozart, one of the most famous examples of a child prodigy who is commonly cited as a born genius. No one questions that Mozart's achievements were head and shoulders above others of his time. What is forgotten is that his *training* was also head and shoulders above others of his time. Mozart's father, a violinist, was a superb and insightful musician. He wrote an important violin instruction book. He was also a skilled composer. Mozart's dad began teaching little Wolfgang when the tyke was only four years old. Dad provided an environment where the young boy could hardly do anything but put in his 10,000+ hours of deliberate practice. Little Wolfgang had an expert teacher encouraging him and feeding him knowledge 24/7, from the age of four. THAT is what started Wolfgang on his path to genius. Not even Mozart was born an expert--he became one.

You Must have a Supportive Environment

Not only must you put in your 10,000+ hours. In many fields it is crucial you start when you are young. Motor skills for playing a musical instrument are most easily learned at an early age. Also, one's available time to engage in endless hours of deliberate practice decreases as the demands of a job or caring for a family come into play.

Being in an environment where you are encouraged to practice your skill or at least where few restrictions are placed on it is an extremely important part of achieving mastery. It can be family support and encouragement or support from an outsider who helps provide that environment or opportunity for 10,000 hours of deliberate practice.

You Need Good Teachers

But that still isn't all of it. You know you have to put in your 10,000 hours. You are in a supportive environment where you are free to do it. But now you need a teacher, coach, or mentor.

Ivan Galamian is acknowledged as one of the best violin teachers of all time. He once made the point that even the best students don't necessarily engage in deliberate practice all by themselves. Galamian said, "If we analyze the development of well-known artists, we see that in almost every case the success of their entire career was dependent on the quality of their practicing. In practically every case the practicing was constantly supervised either by the teacher or an assistant to the teacher."

Scientific research on world-class performers confirms Galamian's observation. Interestingly, it also shows that the future performer needs different kinds of teachers at different stages of their learning.

The research shows that in the beginning most students have loving and caring local teachers who are able to give them lots of praise and time. Eventually, the student studies with a teacher who is an expert himself, who has achieved international levels of achievement. This caliber of teacher gives not only expert instruction but intensive and sometimes painful feedback. But at this level, motivated students actually seek out this type of take-no-prisoners feedback. At the same time, the student is skilled at

recognizing what advice from the teacher works for him and what doesn't. The budding elite performer is fully aware of what he is doing right and concentrates on fixing with deliberate practice what he is doing wrong. Performers, who want to be the best, deliberately choose unsentimental teachers who will challenge and drive them to higher levels of performance.

The best teachers also identify things that will need to be improved when the student reaches the next level of performance skill. While it is important that the teacher be tough and demanding, he must also be sensitive to pushing too hard and too fast which might produce frustration or burnout, even in advanced students.

The ultimate goal of the master teacher is to become obsolete--to teach the student to teach himself. As the student's experience and ability increases, he becomes more independent, able to develop his own plan for his future development. The student leaves the nest to fly on his own.

The Brutal Facts of Reality

If your passion in life involves being a master performer or expert in your field, the preceding are the brutal facts of reality. Take them to heart, but not in a negative way. You now know what you need to do to become an expert. You now know how to *make* your talent. You will not be discouraged that you were not born a genius. There is no such thing.

Remember, you need 10,000+ hours of Deliberate Practice, not mindless or pointless repetitious practice. Your mind must be constantly and intensely engaged *with* the fingers. Find the best teachers you can (note the plural) and allow them to become obsolete.