

How much you improve depends on how much you believe you can – not just effort

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HAVE YOU EVER?

Two pianists practice the same passage the same number of hours. One believes ability is *fixed* and grinds out the hours without much expectation of great improvement. The other believes ability is *built* and that each attempt at learning will improve their skill position for next time, and so on. Which pianist improves the most over time? Whose talent growth will be capped? It's not difficult to predict.

FACT BOX

Growth mindset isn't a slogan — it's a measurable difference in how the brain responds to challenges and error. Students **who believe ability is malleable** show stronger neural engagement with their own mistakes; students who believe it's fixed show avoidance instead. The belief itself improves the neurochemistry that supports learning. Learning gets a boost, and repeated thousands of times over months and years, this boost starts to look *a lot* like "talent."

THE SAME WRONG NOTE

FIXED MINDSET
avoid, repeat, static growth

GROWTH MINDSET
engage, adjust, growing growth

Same challenge. Different brain response. (Ch. 7, Optimizing Pianism)

"Intelligence [is seen as] a malleable quality."

— Dweck & Leggett, cited Ch. 7, *Optimizing Pianism*

THE MYTH

Your speed of learning is fixed.

THE BUST

False — Dweck shows simply that expecting to be "improveable" leads to faster skill acquisition. Skilled learners (*talent*, by some definitions) believe in the possibility of their own skill acquisition through their efforts.

SO THEN

Notice how what you believe about your ability to learn quietly alters your entire pianistic trajectory. How you respond to problems, mistakes and setbacks,

matters. **DON'T** praise or blame talent — it teaches a fixed self-image. **DO** praise healthy process and effort — the feedback loop that keeps on giving!

Consider two students in the same masterclass, both told "that passage isn't there yet." One hears "I can't do it." The other hears "I can't do it... yet" — two entirely different pianists a year from now. Which one will you be?

One step forward... one step ~~backward~~ forward...

Cameron

Concert Pianist. Pianism Scientist. PhD. Physician. Author.

Next issue: the momentum chain — why treating your arm, wrist and fingers as separate parts may be sabotaging your technique.

WANT MORE

Talent matters, but believing in its ability to overcome challenges matters more.

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REF: Dweck, C.S. & Leggett, E.L. "A Social-Cognitive Approach to Motivation and Personality." *Psychological Review* 95.2 (1988): 256–73. · Ng, B. "The Neuroscience of Growth Mindset and Intrinsic Motivation." *Brain Sciences* 8.2 (2018): 20.

ONE FOR THE ROAD

"Failure can be a painful experience. But it doesn't define you."

— Carol Dweck

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Dr Cameron Roberts

www.optimizingpianism.com

www.cameronroberts.com.au



info@optimizingpianism.com

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