

## **BOOK REVIEW**



Learn Faster, Perform Better: A Musician's Guide to the Neuroscience of Practicing by Molly Gebrian. Oxford University Press, 2024. 272 pages. ISBN: 9780197680070 doi:10.1017/S026505172510048X

Molly Gebrian's *Learn Faster, Perform Better* presents a timely and compelling synthesis of neuroscience, practice strategies and pedagogy. As a professional violist with neuroscience expertise, Gebrian brings unique credentials to a field increasingly hungry for evidence-based practice methods that address the practical realities of musical skill development. The book's core message is clear and consistent: effective practice is not simply about repetition but deliberate engagement with the brain's learning processes. Some concepts may seem familiar to musicians (albeit under different terms), or some even appear counterintuitive initially; Gebrian provides the scientific rationale that deepens understanding and appreciation. The book affirms and elevates lived experiences by showing not just *how* certain strategies work, but *why* they are effective—or not.

The book's four-section architecture reflects a sophisticated understanding of staged learning processes, with each chapter weaving empirical research with practical application through scaffolding, thematic coherence and varied reinforcement. Chapters remain concise yet substantive, providing sufficient theoretical grounding to inform effective practice. Initial conceptual contradictions or ambiguities are consistently addressed in later sections, contributing to a coherent and cumulative learning experience. Though each section builds progressively, the book enables readers to engage with individual chapters independently through convenient internal references.

The opening section, "Brain Basics," introduces foundational concepts such as neuroplasticity—the brain's capacity to reorganise and strengthen neural pathways through practice—and the vital role of error correction in learning. Rather than presenting superficial neuroscience, this section highlights the dynamic interplay between practice strategies and neurological adaptation, reframing mistakes as essential growth triggers rather than failures. By demystifying the brain's role in skill development, Gebrian encourages musicians to approach practice with greater intentionality, self-compassion and curiosity.

In "Using Your Time Well," Gebrian translates this understanding into concrete strategies for structuring practice. Topics such as spaced repetition, interleaved learning and the role of sleep are presented not as gimmicks but as empirically validated tools for long-term retention and performance consistency. Gebrian challenges the pervasive myth that longer practice always equals better outcomes, instead advocating for smarter, brain-aligned scheduling—that *how* and *when* one practices matters more than sheer volume. This section's strength lies in its clarity and real-world applicability, offering strategies that are both scientifically validated and logistically feasible for musicians.

"The Power of the Mind" underscores the critical psychological and metacognitive dimensions of musical practice and performance, including mental rehearsal, memorisation and performance confidence. These often abstract topics are rendered accessible through clear explanations and practical, actionable steps. This section expands the concept of practice beyond mere physical repetition, incorporating attentional focus, vivid imagery and the neural underpinnings of memory formation and retrieval. For musicians eager to integrate mental strategies into their routines, this provides a concrete and meaningful framework.

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The "Challenges Specific to Music" section grounds broader cognitive principles in tangible musical performance realities, addressing domain-specific issues like intonation, rhythm and memory challenges. While string playing serves as a primary exemplar, the content remains broadly relevant for instrumentalists coordinating complex visual, auditory and motor inputs. Gebrian explains how regions of the motor and somatosensory cortices expand through use, providing a neurological basis for the refined bodily awareness seen in musicians.

Learn Faster, Perform Better culminates in "Bringing It All Together," synthesising core insights into a cohesive whole, reinforcing the book's central message: practice is most effective when it aligns with how the brain learns. The book is further enriched by thoughtfully curated supplementary materials. Video demonstrations on the author's website enhance practical accessibility, while appendices provide a comprehensive list of practice strategies, sample routines and quick-reference guides. The glossary clarifies scientific terms and supports knowledge retention, and extensive empirical references offer scholarly depth. Together, these resources extend the book's utility well beyond its initial reading, making it a living tool for long-term growth.

A critical reflection emerges regarding the roles of motivation and willpower in habit formation. Citing research, Gebrian suggests that successful habit-building "has nothing to do with" intrinsic motivation or willpower, but rather with the creation of systems and structures that render positive choices automatic (p. 207). While recognising the profound importance of reducing decision fatigue, this position may undervalue motivation's crucial role in initiating behavioural change and willpower's necessity in overcoming inherent resistance to new actions. A more nuanced view might acknowledge a bidirectional synergy among motivation, willpower and systematic support: drive propels action, while robust structures ensure continuation, thereby fostering a positive feedback loop that facilitates long-term habit formation.

What makes this book especially resonant is the direct applicability of its methods—not just within music practice, but in the very act of reading and internalising the book's content itself. As a musician-reader, I consciously applied Gebrian's methods over several weeks: spacing out reading sessions, revisiting chapters, taking notes and, most importantly, translating strategies into my playing and teaching. This experiential approach fostered deeper cognitive encoding, turning the process into a form of pedagogical experimentation. It affirmed the book's underlying principle: how we learn matters as much as what we learn.

The book's pedagogical elegance lies in its adaptability across skill levels and contexts. While certain strategies require cognitive maturity, teachers can adapt concepts using age-appropriate language, tailored resources and contextual examples to cultivate students' self-regulated learning. The emphasis on individual differences, personal reflection and teacher-guided customisation makes this book a valuable resource for musicians, educators and curriculum designers. In my piano teaching, I have already begun integrating several concepts in simplified terms and with supportive materials. For instance, alternating between contrasting musical tasks to enhance long-term retention—an approach I had previously used intuitively—now carries greater clarity and credibility through the lens of neuroscience. Scientific validation has added explanatory power to familiar strategies, transforming them into purposeful routines. This iterative process of application and reflection continues to deepen my understanding and refine my teaching practice.

In sum, Learn Faster, Perform Better succeeds as both a practitioner's manual and a scholarly contribution. Its true strength lies not merely in interdisciplinary scope but in embodying the very principles it espouses—thoughtful design, cumulative learning and meaningful reflection. Gebrian expertly uses the medium of instrumental practice to illuminate the brain's intricate nature, empowering musicians to cultivate more effective, efficient and sustainable learning habits. The book sets a new standard for integrating science with artistic practice, reframing musical development as a brain-informed, intentional and transformative journey. Essential reading for performers, educators and researchers alike, this book inspires musicians to become more skilled, curious, resilient and reflective learners while also appealing to anyone interested in the science behind effective learning and performance.

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