

# *Structuring Effective Lessons through Exercise Science and Motor Learning Principles*

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## **ABSTRACT:**

Training to perform a recital and training to run a marathon have an enormous amount in common. Applied music teachers, however, have traditionally taught out of experience and intuition, relying less on exercise science and motor learning principles than athletic trainers. This presentation argues that these scientific concepts are easily understood and can be seamlessly integrated into training for artistic performance. A basic understanding of several core ideas related to exercise science and motor learning paves the way for a systematic structure to individual lessons as well as longer-term routines, helping teachers and performers to reach their performance goals and effectively “train up” to specific tasks.

Specific concepts explored in this poster will include distinguishing between motor performance versus motor learning, the stages of motor learning (verbal/cognitive, motor learning, and automatic), feedback and cueing—including knowledge of performance (KP) and knowledge of results (KR)—reducing learner dependency, and directing learner attention. A distinction will also be made between skill acquisition (SA) and fatigue management (FM), as well as training considerations relevant to applied music teachers, such as the overload, specificity, and reversibility principles. Understanding these fundamentals—which have long been used by athletic trainers—can transform the way one structures an individual lesson and rehearsal schedule, paving the way for the performer to achieve maximum success.

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## **BIOGRAPHY:**

Matthew Hoch is Associate Professor of Voice and Coordinator of the Voice Area at Auburn University, where he teaches applied voice, diction, and vocal literature courses. Prior to coming to Auburn in 2012, he spent six years as Assistant Professor of Voice at Shorter College, where he taught applied voice, vocal literature, and served as Coordinator of Voice Studies. Dr. Hoch's students have gone on to successful careers in both classical and musical theatre genres and have won awards from the Metropolitan Opera National Council (MONC), NATS, MTNA, ACTF, and others. He has appeared as a soloist with the Oregon Bach Festival, the Santa Fe Desert Chorale, the Vox Consort, Harmonie Universelle, the Hartford, Rome, and Nashua Symphony Orchestras, the Atlanta Baroque Orchestra, and the United States Coast Guard Chamber Players. Dr. Hoch is the 2016 winner of the Van L. Lawrence Fellowship, awarded jointly by the Voice Foundation and NATS. He is the author of three books, including *A Dictionary for the Modern Singer* (2014), *Welcome to Church Music & The Hymnal 1982* (2015), and *Voice Secrets: 100 Performance Strategies for the Advanced Singer* (2016), coauthored with Linda Lister. He is also the editor of the recently published *So You Want to Sing Sacred Music* (2017). His articles have appeared in the *Journal of Singing*, *Journal of Voice*, *Opera Journal*, *Choral Journal*, *Chorister*, and *Journal of the Association of Anglican Musicians*. From 2008–2016, he served as Editor-in-Chief of *VOICEPrints: The Official Journal of NYSTA*. Dr. Hoch has presented his research at many national and international conferences, including ICVT, PEVOC, PAVA, NATS, VASTA, MTNA, NOA, CMS, HICAH, SAM,

NAfME, ASA, IHS, the Hymn Society of the United States and Canada, Voice Foundation Symposium in Philadelphia, and the International Symposium on Singing and Song in St John's, Newfoundland and Labrador. Dr. Hoch holds the BM (*summa cum laude*) from Ithaca College, MM from The Hartt School, DMA from the New England Conservatory, and the Certificate in Vocology from the National Center for Voice and Speech. In addition to his academic life, he also serves as Choirmaster and Minister of Music at Holy Trinity Episcopal Church in Auburn, Alabama, where he lives with his wife, Theresa, and three children: Hannah, Sofie, and Zachary.