

***Connecting Voice Science to Vocal Art***  
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### **Lecture III: *The “How” of Voice Science: Motor Learning Theory***

#### **Voice Science or Vocal Art?**

Which vocal teaching method is better? A scientific approach, based on a thorough knowledge of physiology and acoustics, or an empirical one, based on professional artistic experience? Lynn Holding, Associate Professor of Voice at Dickinson College, offers a series of lectures entitled ***Connecting Voice Science to Vocal Art*** to explore this dilemma. Holding is both a professional singer and trained vocologist. Her work has positioned her between both worlds, where she believes a rapprochement between science and art can be found within the field of cognitive science.

It is almost twenty years since the the 1990s was named *The Decade of the Brain* by presidential decree, in order to “enhance public awareness of the benefits to be derived from brain research”. Now is the time for research in the physiology and acoustics of singing to include the fruits of cognitive science research. Cognitive science augurs profound implications for the future of enlightened vocal pedagogy, generating a paradigm shift in emphasis from how well teachers teach, to how well students learn.

Her presentations, ***Connecting Voice Science to Vocal Art*** are based on her two-part article *Voice Science and Vocal Art: In Search of Common Ground*, and *Voice Science and Vocal Art Part II: Motor Learning Theory*, published in the November/December 2007 and March/April 2008 volumes of the Journal of Singing. She has given ***Connecting Voice Science to Vocal Art*** presentations at Indiana University, The State University of New York at Fredonia, the 50th National NATS Conference in Nashville, Tennessee, and at the Third International Physiology and Acoustics of Singing Conference in York, England.

#### **Lecture III: *The “How” of Voice Science: Motor Learning Theory***

Inasmuch as voice science has illuminated pedagogic practice, it has also caused much consternation, due to the lack of an answer to one simple but very perplexing question: How? According to noted voice scientist Katherine Verdolini, “Recent research has produced evidence contrary to preferred training styles in many voice clinics and studios. The evidence strongly underlines the principle that knowing “what” to train does not necessarily translate directly to “how” to train it.”

Indeed, the successful transference of vocal technique from teacher to student ultimately hinges on the ability to impart a motor skill. Research in motor learning augurs profound implications for the future of enlightened vocal pedagogy. In my lecture: *The “How” of Voice Science: Motor Learning Theory*, I demonstrate that if the question “How” is effectively answered, a paradigm shift in vocal pedagogy will occur, from how well teachers teach, to how well students learn.

This lecture is based on my article *Voice Science and Vocal Art Part II: Motor Learning Theory* (published in the March/April 2008 volumes of the Journal of Singing).

