



CELLO

Twenty-first Century Practice Revelations or Teaching an Old Dog New Tricks

by David Holmes

Do you ever feel that if you live long enough that many of your strongly held convictions will be proven wrong? Science keeps turning diet and medication truisms on their head: that sleep aid that's been so safe to take, well, it might be linked to Alzheimer's. Tylenol can stop that headache, but, whoops, it could cause liver damage. Consuming saturated fat is bad, so let's create trans fats instead, which are, uh-oh, terrible for you.

As concerns the art of practice, the same shifts (excuse the pun) have been occurring, which is both exciting and exasperating for some of us musicians who have long held unwavering practice mantras that have now been proven erroneous. Sigh... The good news is that as long as we are alive and practicing we can improve and reform old habits and share them with the next generation of cellists, who hopefully won't do the equivalent of beating their heads against the practice room wall, as I often did—which could explain a few things about me. I would like to share some new-to-me practice ideas that have helped my teaching and playing.

An article by Dr. Christine Carter, a clarinetist teaching at the Manhattan School of Music, really had a profound influence on my ideas about practice. She did her dissertation on the “contextual interference effect,” which points out the deleterious, but very natural effects on human beings when habituation occurs. Here is a quote from Dr. Carter's article *Why the Progress in the Practice Room Seems to Disappear Overnight*. (Find the full article at: <http://www.bulletproofmusician.com/why-the-progress-in-the-practice-room-seems-to-disappear-overnight/>)

Repetition, babies, and brain scans: Early on in our musical training, we are taught the importance of repetition. How often have we been told to “play each passage ten times perfectly before moving on”? The challenge with this well-intentioned advice is that it is not in line with the way our

brains work. We are hardwired to pay attention to change, not repetition. This hardwiring can already be observed in preverbal infants. Show a baby the same object over and over again and they will gradually stop paying attention through a process called habituation. Change the object, and the attention returns full force. The same goes for adults. Functional Magnetic Resonance Imaging has demonstrated that there is progressively less brain activation when stimuli are repeated. The fact is, repeated information does not receive the same amount of processing as new information. And on some level, we all know this. Constant repetition is boring and our boredom is telling us that our brains are not engaged. But instead of listening to this instinctive voice of reason, we blame ourselves for our lack of attention and yell at ourselves to “focus!” Luckily, there is an alternative.

Dr. Carter points out a baseball study that had one group of hitters swatting 15 fast balls, 15 curve balls, and 15 sliders. The other group of hitters swatted at types of pitches thrown in units of 3, followed by a change, followed by three more, etc. The results? The hitters from the second group improved their hitting skills much quicker than the first group, who easily got habituated to the pitches of the same type thrown to them in groups of 15.

The alternative, then, to the old “grind it out” method of practice is to break practice sessions into smaller time units, which keeps habituation at bay with a variety of quickly changing practice units. For the past three months I have been practicing in three-minute units. I set my smart phone timer and when it goes off I always go to the next “spot” to practice. Here is an example of one of my practice regimens, again, all in three-minute units.

1. Opening section of Franck *Sonata* 3rd

movement

2. Main theme to Franck 4th movement
3. Scales with 2, 4, 6 bowings
4. Beethoven *1st Sonata*, rondo theme, last movement
5. Popper *12*, opening section
6. Becker spiccato exercise
7. Beethoven *1st Sonata*, coda to 1st movement
8. Beethoven *String Quartet, Op. 59 No. 2*, 1st movement, opening

At this point, 24 minutes have passed. What I usually do next is start from the top and proceed down the list again. If I do it 3 times, I have over an hour's worth of practice. I love the results of this new practice regimen in my life. I am enjoying practicing more and am learning more quickly than I have before. I had always been a bit of an obsessive practicer who would repeat passages interminably (even until they got worse!), who believed as I was taught, that persistence is all that matters. The notion of variety was lost to me during literally thousands of hours of my practice. Big, big sigh... The three-minute interval practice—it could be 4 or more minutes, it's up to you—tires me more quickly because my brain is more completely engaged in what I am practicing. I have been utilizing this same quickened cycling of material in lessons and group classes as well, and I like the results I have been getting. Habits are hard to change, but new ideas can lift us out of the mundane and the routine.

Practice and Teaching Resources from the Internet

There is so much “stuff” on the internet concerning every possible issue that the problem has become how to find the quality in all that quantity. Here are three resources on the web that I have found helpful regarding practicing, performing, and teaching.

Robert Duke: Anything written by this distinguished professor from the University of Texas and head of The Center for Music Learning is well worth the time. If you google his name, many links will get you

to a number of writings and videos. He has been a prominent consultant for the Suzuki Association of the Americas, and has written *Intelligent Music Teaching*, a concise and pithy book that challenges, through research, many tenets of traditional music instruction thought. His 14-page intro to *A Radical Approach to Beginning Band* has many insights that apply to string teaching. Duke is also a great speaker, and there are a number of his live presentations on YouTube.

The NPR website link called *Deceptive Cadence* has a helpful writing by Anastasia Tsioulcas called *Ten Easy Ways to Optimize Your Practice*. (<http://www.npr.org/blogs/deceptivecadence/2013/09/03/216906386/10-easy-ways-to-optimize-your-music-practice>) Written in collaboration with the *From the Top*

radio show is a column titled *Getting Kids to Practice Without Tears or Tantrums*. (<http://www.npr.org/blogs/deceptivecadence/2012/06/18/155282684/getting-kids-to-practice-music-without-tears-or-tantrums>)

Dr. Noa Kageyama is the purveyor of the *Bulletproof Musician* website. (<http://www.bulletproofmusician.com/blog/>) Kageyama is a very accomplished violinist currently teaching at Juilliard, who became fascinated with why some musicians perform at a higher level under pressure than others do. He delved into sports psychology and on his site he has writings on topics such as: *8 Things Top Practicers do Differently*, *How Many Hours a Day Should You Practice*, *What is More Effective—Praise of Criticism?* and much more as well.

Enjoy!

David Holmes is a former faculty member at the Augsburg College Suzuki Program and has been a guest clinician at over 40 Suzuki institutes in 9 states. He has presented lectures on group class teaching and on spiccato and sautillé at the SAA national conference. David was an adjunct faculty member at St. Cloud State University for two years, where he taught cello and performed with the St. Cloud State University Piano Trio. An active performer and free lance cellist in the Twin Cities, David is cellist in the Northern Lights String Quartet, is an artist member of Thursday Musical, and has been principal cellist of the Minnetonka and Bloomington Symphonies as well as a member of the Minnesota Opera Orchestra. He teaches out of his home in St. Louis Park. †