

# THE THREE STEPS OF SUCCESSFUL PRACTICE

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In July, 2006 there was an excellent article in *Scientific American* by Philip E. Ross called "The Expert Mind." The article discussed how people acquire the skills to become experts in their field. Through the study of chess masters, cognitive scientists determined that "effortful study" is the key to developing expertise, whereas innate talent has surprisingly little to do with achieving success. Effortful study is described as "continually tackling challenges that lie just beyond one's competence."

That, of course, is exactly what we do when we practice a musical instrument. We develop new skills by taking on something that requires just a bit more of us. In his book *Teaching from the Balance Point*, Edward Kreitman outlines the three steps critical to developing a new skill: comprehension, cooperation, and constructive repetition.

## 1. Comprehension

The first step to acquiring a new skill is understanding exactly what the end result should be and knowing what is required to achieve it. Let's say your child is learning how to play the "Mississippi Hot Dog" rhythm on the open E string. In order to succeed, she needs to have a clear mental picture of the motion that is required of the arm, know the feeling of that motion when it is done correctly, know what it looks like, and know what it sounds like. It is my goal during lessons to cover this first step before sending a student off to accomplish steps two and three at home. Therefore, if ever you or your child feel you don't fully comprehend something, please tell me.

## 2. Cooperation

In the second step, you "practice until you get it right." Here, the goal is to get your physical body to cooperate with your mind's understanding of the task at hand. Allow yourself only three tries to get it right. If after three tries you haven't succeeded, stop trying for the moment. One of several things is possible:

- You are playing too fast
- You aren't focused.
- You don't fully understand what is required (see step #1).
- Your goal is too large.

Often we are so anxious to do something that we whip right through it, not giving our mind the time it needs to direct our muscles. Make it easier for your muscles to learn by

choosing a slower tempo that allows you to play correctly.

If you are having trouble focusing (and by this I mean your mind isn't an active participant; you are playing, but letting your muscles be in charge of the motions, rather than your mind), put down your violin for a moment. Picture yourself doing the task correctly. Imagine what it looks, feels, and sounds like. Analyze what is required of your muscles—what exactly is it that you want them to do? After developing a clear model in your mind, pick up the violin again, but keep your mind engaged in directing your muscles.

If you realize that you are missing some information to correctly accomplish your task, no amount of practice will help at this point. If this is the case, please don't hesitate to call me. However, assuming you do understand what is required, you may need to either look at the problem from a different angle or simplify the task by breaking it down.


### **3. Constructive Repetition**

In this final step, the goal is to make your success permanent. As violin teacher Ronda Cole puts it, you “practice until you can't get it wrong.” It takes about a week of daily repetition for a new skill to become consistent. Returning to our original example, let's say it took your child five attempts before she played Mississippi Hot Dog correctly on the E string. (After the third attempt didn't work, you had stopped to analyze what was going on.) If you stop at this point, your child has at best a one-in-five chance of playing it correctly tomorrow. Your goal now is to better the odds.

In order to reinforce the feeling of “correct” and develop consistent control, attempt in no more than ten trials to produce the correct action five times. To keep track, you can use a stack of ten pennies (or checkers, raisins, chocolate chips, etc.) and a stuffed animal (or robot, doll, etc). Each time your child succeeds, she gets a penny. Each time she doesn't, the stuffed animal gets a penny. Help your child stay mentally engaged by asking her who gets the penny and why. Avoid using words like “bad” or “mistake.” Stop as soon as she achieves five successes and record the score (i.e.: 5 successes out of 7 attempts). Alternatively, stop as soon as all the pennies are used up, no matter what the score is, and move on to something else.

If your child wasn't able to achieve success in five out of ten trials, continuing at this point will only serve to reinforce an overwhelming feeling of “incorrectness” in her muscles and could lead to frustration. So stop for now and move on to something else. At your next practice session, you can go back to the Cooperation step and reevaluate what is going on. It is possible that your goal is too large, in which case you should simplify it by breaking it down further. You could also call me for advice.

Assuming your child was able to achieve five successes in less than ten trials, move on to something else. Tomorrow, repeat steps two and three. By the end of the week, your child should be achieving close to five out of five. At this point, control of the new skill has become consistent. Celebrate!

These three steps have the potential to save you and your child from hours of frustration. I remember many times playing something over and over until I finally got it right, at which point, relieved, I would move on to something else. The next day when I returned to that same spot, I had to start all over again. Inevitably, I became frustrated and thought I was incapable of playing the passage correctly. In reality, my muscles were doing exactly what I had taught them to do! What a revelation it was when I finally understood that you can't stop when you get something right for the first time; that is just one step. 

## RECOMMENDED READING

For more information and links to the following articles and books, visit [www.kgviolin.com](http://www.kgviolin.com) and go to "Resources."

*Scientific American* — June 2006

"The Expert Mind"

by Philip E. Ross

*The New York Times* — March 4, 2007

"How to Grow a Super-Athlete"

by Daniel Coyle

*Teaching from the Balance Point*

by Edward Kreitman

*Helping Parents Practice: Ideas for Making it Easier*

by Edmund Sprunger

*How to Get Your Child to Practice . . . Without Resorting to Violence*

by Cynthia Richards

*Practicing for Artistic Success*

by Burton Kaplan