

More Effective Learning

Improving Practice Skills, Memory, and Drumming

by Marc Dicciani

As a private teacher, professor, and researcher, I have a great interest in learning how our brains, neural systems, and bodies work together as we develop music and drumming skills. I've done research for several years to devise ways for me and my students to translate that information into effective and efficient practice techniques.

Over the past few decades, cognitive psychologists, neurologists, neuroscientists, and others have begun to build a body of evidence containing the most effective learning strategies. In so doing, they've come to understand that some of the ways we currently learn and train are based on theories that have been handed down, and some of those may be ineffective. Although many public school teachers have begun utilizing these new methods, they've not yet made it into the mainstream of music instruction.

Many drummers have benefitted from having had great teachers, as well as from going through a lot of trial and error and spending countless hours practicing, studying, and playing. However, if some of this current research had been known to us years ago, we might have saved ourselves significant amounts of time and frustration, and maybe even developed quicker and with deeper understanding. From these recent findings, we can now identify methods to maintain and increase our skill levels and musicianship by maximizing whatever time we have available.

There Are No Shortcuts

Learning is an acquired skill, and we can all become better at it. Successful learning and effective practice is intentional—not just the result of putting in the time. Of course, we need not become experts in neurobiology, neuroscience, psychoacoustics, cerebral physiology, anatomy, genetics, perception, and cognition in order to become better learners. But we should try to adapt and make use of the research from those areas that is now available.

It's important to understand that this research hasn't produced any shortcuts. Acquiring skills and developing ability still require time, a plan, commitment, desire, consistency, perseverance, and patience. And effective practice should be deliberate and effortful, in the "learning zone" (more on that in a moment), and organized but variable, and it should incorporate constant feedback.

Practice is deliberate and effortful when we coordinate the "what" and the "how." First, select specific aspects of your playing that you want to improve, and then make your practice session focused, directed, creative, conscious, dedicated, contextualized, repetitive but interleaved (divided into varied segments of short chunks of time for each idea), and broken into small components. Practice is never automatic and should always include our own input, imagination, and creativity.

To contrast, a more typical but less effective form of practicing, called massed practice, is when you spend hours playing one or a few specific things. This approach is similar to cramming for a test. You feel like you've attained some mastery, but it's short-lived. Most drum method books are filled with exercises and patterns, some of which can be extremely valuable to learn. But if we just practice the exercises and overlook the underlying concepts, our learning may be illusory. It's easy to mistake fluency in playing specific examples with mastery of the fundamental ideas. When using books and other

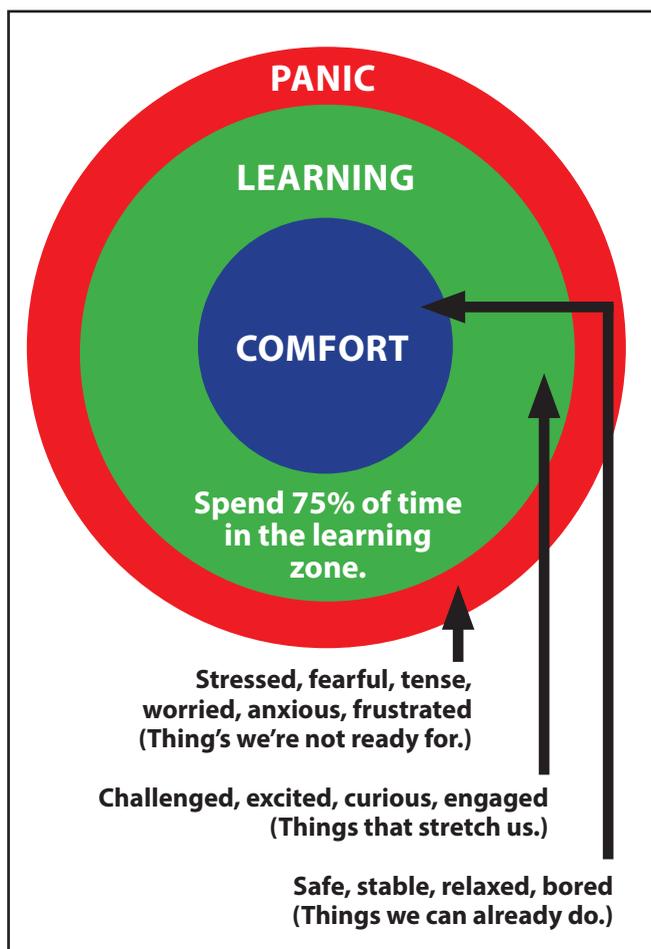
printed materials, make certain to incorporate your own ideas and interpretations.

The Learning Zone

It's important to practice in the learning zone by dividing your time at a ratio of about three-to-one between development and maintenance (comfort zone). This ratio is ideal for rapid growth. You know you're in the learning zone when you feel challenged, but not frustrated, with what you're practicing. These are things that we can't yet do fluently but that we understand. Below is a chart that illustrates this concept.

Feedback Is Your Friend

In order to incorporate constant feedback into your practice routine, you need to spend time listening to recordings of the masters, to the advice of your teachers, and to recordings of yourself playing along with albums, play-along tracks, loops, your band, and so on. Make it a habit to record audio and video of your playing daily.



Be Organized But Varied

Practice sessions should be organized but variable, elaborative, and interleaved. Organize your practice by listing specific goals (see the practice grid chart at the top of the facing page). Vary what you

Movement	Technique	Styles/ Musicality	Improvisation	Reading/ Literature	Other

practice (don't practice the same things every day), and vary the locations and times in which you practice, if possible.

Elaborative practice is when you work on something for a shorter period, and you follow that with some improvisation based on what you've learned. Interleaved practice is when, after practicing something for twenty to thirty minutes, you move on to something completely different. Then during the following day or two, you return to practice the original idea, at first relying on your memory and incorporating improvisation and interpretation that uses different tempos, dynamics, and so on. Combining elaborative and interleaved practice is critical in developing recall and being able to bridge the gap from practice to performance.

The Practice Chart

The six subject areas I practice for twenty to thirty minutes at a time before moving on to the next category are movement/mechanics, technique, styles/musicality, improvisation, reading/literature, and "other" (reading magazines, transcribing beats and solos, studying videos, etc.). After ninety minutes of continuous practice, I take a break for between fifteen minutes and a couple of hours. Below is the practice grid that I use for myself and with my students.

Here's how to use the chart. First, place an appropriate idea in each of the boxes that you want to practice. Work on the first one for twenty to thirty minutes, and then move on to the next box in the same row. When you finish a row, move down to the next row, and repeat the process. After ninety minutes, make a note of where you're at on the chart, and take a break. The break will help deepen your learning.

Start your next practice session where you left off, and when you get to the bottom of the page, go back to the top and start again. After a few weeks, as items begin to move toward your comfort zone, create a new practice schedule with things from your last routine that you want to continue working on, and add some new items.

The "other" category is intended for items that don't require you to have sticks in your hands (transcribing, researching, drum tuning,

etc.), so you can skip that category until a time later in the day when you can't be at your drumset.

Final Thoughts

Change it up! Contrary to popular belief, most people do better over time by varying their study routines and practice locations. The greater number of environments in which you practice or rehearse, the sharper and more lasting the recall of that material becomes. Since we cannot predict the context in which we'll have to perform, we're better off varying the circumstances in which we prepare. This kind of experimenting reinforces learning and strengthens memory and recall.

Finally, here are some further tips I share with my students:

- Always set goals, and remember that *how* you practice is as important as *what* you practice.
- Practice in context through a wide range of tempos.
- Don't play when you practice, and don't practice when you play.
- Practice mentally (rehearsing, imagining, thinking, analyzing) whenever possible. Although physical practice is preferable to mental practice for learning a motor skill, mental rehearsal is an effective method for augmenting learning.
- Learn many styles of drumming and music, even if it's just to inform your primary interests.
- Read and research often.
- Use your imagination and develop a unique musical voice. Learning becomes unlimited through elaboration (adding your own elements and ideas to what you're practicing).
- Repetition alone is not enough. Understanding, as well as the conceptualization and self-expression of what we learned, makes information useful and usable.
- Be patient, be engaged, be enthusiastic, and have fun!

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