



BY JARROD SHAPIRO, DPM

Deliberate Practice

This is how it can help you learn better.

Practice Perfect is a continuing every-issue column in which Dr. Shapiro offers his unique personal perspective on the ins and outs of running a podiatric practice.

Did you know there's a correct way to learn? It's not about what kind of learning style you prefer or how talented you are. As it turns out, there is a best way people learn, and psychologists who study education and expertise have discovered it through years of research. The best way to learn anything is called *deliberate practice*. Without giving it a lot of fanfare, here are the most important aspects of deliberate practice. For those interested, the book *Peak: Secrets from the New Science of Expertise*, by Anders Ericsson and Robert Pool, is highly recommended. By way of introduction, Anders Ericsson is perhaps the most expert person in the world on studying experts. He has worked with athletes, musicians, and physicians, among many others and studied what made experts achieve their respective pinnacles of success...and it all boils down to deliberate practice.

Here's a quick, high-yield summary of the major characteristics of deliberate practice.

- 1) It develops skills that other people have already figured out. A regimen is designed and overseen by a teacher or coach familiar with the abilities of expert performers.
- 2) The focus is on well-defined specific goals, improving some aspect of the target performance. This focus is on a specific aspect of a skill.
- 3) It requires full attention and conscious actions.



To learn most effectively, use the technique known as deliberate practice.

- 4) Its practice is outside one's comfort zone and just beyond the trainee's abilities. This requires a maximal effort so it is generally not enjoyable.
- 5) It involves feedback and modification of efforts.
- 6) It depends on effective mental representations which are detailed pictures of what a specific skill looks like when performed by an expert.

An Example of Deliberate Practice

Let's talk about one example to help elucidate the aspects of deliberate practice: training a resident to do a specific surgical procedure of the foot and ankle: a bunionectomy.

First, we would need a list of very specific actions that an expert foot and ankle surgeon performs when doing this procedure (skin in-

cision, dissection, capsular incision, bone cut, fixation, and closure). Each of these steps is broken down further into specific skills. For example, the incision may be composed of proper incision placement, scalpel position 90 degrees to skin, appropriate controlled depth incision, etc.).

Next, the resident would perform the skin incision multiple times, each time receiving direct, focused, and specific feedback by the teaching attending with an emphasis on what was done *incorrectly*.


During this process, residents would have viewed and studied either videos or live demonstrations of an expert level surgeon doing the skin incision. This creates a mental representation of what the correct procedure looks like. As residents


Continued on page 36

PRESENT Podiatry

PRESENT Podiatry (podiatry.com) is a podiatrist-owned-and-run company that proudly serves as the largest provider of online CME to the podiatry profession. One of the key lectures in their online CME collection is highlighted below.

Total Contact Cast





Christopher Bromley, DPM
Chairman, Foot and Ankle Surgery
Vassar Medical Center
Poughkeepsie, NY

PRESENT e-Learning System has designated an unrestricted educational grant from

3M Science. Applied to Life.™

to support this online education activity.

CPME 0.5 Credit

Christopher Bromley DPM discusses statistics about diabetes, obesity and the management of risk factors for diabetic wound ulcers. Dr Bromley examines the advantages and disadvantages of total contact casting with the newer materials and supports his statements with statistics and case studies.

View this lecture for CME Credit today at <https://podiatry.com/lecture/100>

36

Deliberate Practice (from page 35)

perform these repetitions with constant feedback, they compare their incisional approach with that of the expert, focusing on where their method is deficient, and building an *increasingly detailed mental representation* of how to make an incision.

These steps are repeated for each aspect of the procedure, until the resident is able to execute the entire procedure in a living person. It may be apparent that this

**Deliberate practice
may be used in any field to learn
any skill.**

type of training would be best on in vitro simulations of various types with the resident only performing the procedure on a live patient after having reached a certain pre-arranged threshold.

Deliberate practice may be used in any field to learn any skill. It clearly requires organization, excellent coaching, and resources to allow simulation (depending on the skill in question). To understand and learn more about the details of this method read Ericsson's book, and let the learning commence. **PM**

Dr. Shapiro is editor of PRESENT Practice Perfect. He joined the faculty of Western University of Health Sciences, College of Podiatric Medicine, Pomona, CA in 2010.