Getting Started Toolbox #8

Your Resource of Big and Small ideas

Deliberate Practice

Get a jump-start

to better learning!

This toolbox a great place to discover new ideas because it's full of suggestions for promoting more effective evidence-based study strategies by your child.

Save this document because you will want to use it to discover "start small" steps to begin conversations and mini-lessons with your child about using deliberate practice.

Tools

Yes

Yes

Yes

Maybe

No

Introduction

This is your toolbox of creative ideas to help you start improving those strategies in the learning dimension eight. As with the handy toolbox you might have in your closet or garage, it's there to be a resource where you return to it time and time again. The right tools make your job easier as a parent learning coach.

You pick and choose those tools that will best serve your child. Take a little time to get familiar with the concept of deliberate practice. Save these exercises and mini-lessons so you can easily pull them up when you need a new idea.

The expertise from the field of change management dictates we start our improvement efforts small – you focus on building initial momentum and learner confidence. Encourage the use of a strategy as *self-scientists* and experiment with it until it becomes a comfortable habit.

Don't put unnecessary pressure on yourself to implement all of the ideas in it right away. That does not work.

> "*The most effective (improvement) method of all: deliberate practice. It is the gold standard, the ideal to which anyone learning a skill should aspire.*"
>
> - Anders Ericsson

How to Use Your Toolbox

This toolbox will help you decide where to begin your conversations and mini-lessons. It will help you shift from the person taking this course who is a ***consumer of information*** to the action-oriented leader and ***implementor of ideas*** to reach the positive changes you seek.

- Use it with your *3 Learning Challenges Guide and Planner* here in lesson 5. Support your learning challenge with the ideas, conversation topics, and mini-lessons from this and other toolboxes.
- Deliberate practice applies to many learning situations but not all. Use it when you want to greatly improve your skills and reach an expert level of performance in activities like playing the piano, hobbies like playing chess, or finding a breakthrough in a sport. It may be too much work to apply to everyday learning, although some of the steps in it can be useful to know.
- Because it takes effort, you will want to find an activity your child is passionate about where there is a desire to get much better. This creates a powerful tailwind for you.
- Once you learn to do it, you can apply it to other areas where expert performance is desired. For example, when deliberate practice works to improve music training, once your child is comfortable, you can migrate it to language training.

To prevent overload, "start small" seeking initial success by applying it to only one subject or area. Work on it as a new way to train until it becomes comfortable. Use your weekly study planning and review meeting to support it which is a good place to provide coaching feedback.

Version 6.0

Idea Generator Dimension Eight Focus and Deliberate Practice

Read this to help your child learn about deliberate practice (DP).

We now know that expert performers use a different method for learning, called deliberate practice. The reality for most people is they learn something, they seem to reach a point where they plateau, and then never get better. Why? They don't know how to push themselves to higher levels. Deliberate practice provides the key – it allows the learner to break through this plateau and reach much higher levels of skill and knowledge.

Traditionally, we tend to think about deliberate practice in terms of expert performance in music, the arts, sports, and demanding competitive activities like chess. While this is true, it also has a very important role in studying and learning for any subject where you desire to get much better. Don't overlook this as a central homeschooling learning strategy.

The Learning Strategy Assessment questions that helped you assess this dimension:

1.	My child engages in active efforts to push herself when she is studying. She often varies activities to keep the efforts challenging.
2.	My child develops a specific goal for each study session. Examples of this are quantifying the number of problems he or she will solve, how many pages will be read, how many sections of a report will be written, etc.
3.	My child actively takes steps on his own to eliminate or minimize distractions during study sessions. Include social media, TV, and background music in this assessment. Do you have to intervene or remind them to eliminate or correct distractions?
4.	My child finds it difficult to focus during study sessions and seems to get easily distracted.
5.	My child finds active ways to get feedback on how effective his or her study practices are going. Examples of this include things like frequent self-testing, trying to recite or list facts or information without looking, keeping score of number correct when using flashcards, etc.

Key Ideas for Conversations

We now know expert performers use a different method for learning, called deliberate practice. The reality, for most, is that we learn something and improve for a time, then seem to reach a point where we plateau and never seem to get better, no matter how hard we try. Why is this?

Because most don't know how to push themselves to higher levels. Deliberate practice provides the key – it allows us to break through this plateau and reach much higher levels of performance.

1. Share the Ben Franklin Case story from lesson 1 in this course with your child. Incorporate this into a lesson. After reading the story, ask some thoughtful questions. Why did he do all of these things to help him learn to write well? Take time in your conversation to examine why these worked so well for him. Next, explore what we can learn from his experience. "What can you do to apply these ideas to your study of ____?"
2. Talk about each of the 5 components of deliberate practice. Learn how to do more of each. Practice it. Encourage it through conversations in your weekly SPR meeting.

View details of the 5 components by turning to page 6.

Background

For the student who wants to learn how to play Beethoven, or the weekend athlete who wants to run a marathon, Anders Ericsson had some important news for you: *You don't need to be born with a gift*.

Dr. Ericsson, a professor of psychology and peak performance at Florida State University, discovered that sustained practice of a certain kind was more important to high performance than innate ability. He affirmed an important point that is useful to professional coaches, trainers, and homeschooling parents.

If you want to be the top of your field in academic, artistic, or athletic pursuits he called for the need for "*deliberate practice*," an effort focusing on correcting weaknesses and monitoring your efforts and, most importantly, guided by a coach who pushes you. This is why we have identified this learning strategy dimension as one you need to improve.

His work encouraged a trend in medical education to place greater emphasis on practicing skills and providing feedback to correct shortfalls. He also made the point that this type of practice is often hard and "generally not fun."

It's not new that parents and teachers have long been emphasizing the importance of practice. What is different is the nature of that practice. Ericsson observed that people often practice the wrong things. They tend to work on those comfortable things they already know, instead of the things they don't know how to do.

His 2016 book, "Peak," is considered a landmark work on how expert performers train. He studied expertise in all kinds of situations from graduate students he observed learning strings of random numbers to elite violinists at an academy in Berlin.

Key Ideas for Your Coaching

- ✓ Deliberate practice is harder and should not be applied to every type of study. Use it where improvement to elite levels of performance is desired.
- ✓ The child who experiences success and the great satisfaction that comes from mastering hard things through deliberate practice is forever changed for the better. She will embrace the benefit of hard practice and do it again and again to achieve the things she wants.
- ✓ Identify one thing your child wants to excel in, then start applying deliberate practice. Your best opportunities for coaching come through those more difficult things to learn like second languages, athletics, playing chess, and learning to play a musical instrument. Use the checklist on page 6 to examine and improve something your child is already practicing.
- ✓ The longer-term goal, in the case of college readiness, is for the child to know how to apply it to other things in life. This means the child needs to develop an understanding of how it works and why you follow each point. Included in this is accepting the important role of coaching to improving your own learning. Many resist this because they hold the mistaken belief that needing a coach represents an individual shortcoming.

Footnote: Sadly, we recently lost the great thinker Anders Ericsson in June of 2020. His great ideas about learning, however, will live on and continue to benefit all of us.

Prepared by James P. Haupert

Deliberate practice is a "keystone habit" you can leverage to improve other study strategies. But it takes time and practice to master. People who coach for a living are familiar with it. When your child learns to do this, you gain the added benefit of improved learning as the skills naturally cascade down into other everyday learning practices.

To get better at it, start by selecting a learning subject or activity where the payoff is large such as practicing a musical instrument, training for a sport, or learning a second language. Choose a skill *where the student desires to get much better* because student motivation will be needed to sustain it. Learn to use it where you desire performance breakthroughs.

Coaching Points to Emphasize

1. To begin, **evaluate your practice** or training sessions against the five components of deliberate practice. Examine closely the methods you are using. Identify the gaps.
2. **Focus on the process** (the way you spend your time) when you train instead of the product (that which you want to accomplish). Aspire to make today's training thorough and tight; the exam or the final goal may be months away and too distant to motivate you.
3. **Adopt the new mindset** that learning is growing your brain - When you first begin to learn something, you are making new neural patterns and connecting them to existing ones. The student will initially find this to be *harder* and learning to *feel* slower.
4. **Develop measurements and frequent skill assessments** that can prove to the student how much more effective this type of practice is for them. Numerous studies prove deliberate practice yields much better learning results and higher levels of performance, but at the time students report it feels *no more effective*. This illusion is overcome by looking at the data.
5. **Effective training connects new information with existing networks** in the brain. Help your child relate new materials or techniques to things they already know. Discuss how new training fits to existing skills.
6. Emphasize how the underlying models, concepts, and representations fit together as a whole. Understanding, at multiple levels, is the *superglue* that holds all the underlying memory traces together.
7. **Practice in a way the student gains context** so they know how and when to use the new information in real-world situations. Go beyond learning and practicing a skill in isolation, and train with related, and unrelated problems so the student can see when to use it, and when not to use it.
8. **Interleave the training** and vary the activities in the practice sessions so they mimic the situations and skills you are training for.
9. **Discuss how the student will get more frequent and immediate feedback**, and how much of this will source from the coach, and from the practice itself.

Hint: One way you can start your journey to more deliberate practice by beginning the Pomodoro technique with a timer.

The Five Elements of Deliberate Practice - SPICE

Anders Ericsson identified these 5 components of "deliberate practice." Use this checklist (√) to evaluate your learning or training regimen then improve it by adding SPICE!

Thanks to Nathan Lozeron for inventing the SPICE acronym

Specific performance targets

"*Deliberate practice involves well-defined, specific goals and often involves improving some aspect of the target performance; it is not aimed at some vague overall improvement.*" – A. Ericsson

- ☐ All my learning and training has specific performance goals or outcomes
- ☐ My major learning goals are broken down into smaller intermediate goals
- ☐ When I practice, the results are measured, tracked, and build one upon another
- ☐ I plan and guide my training by following how the best in this field train

Periods of intense focus

"*Deliberate practice is deliberate, that is, it requires a person's full attention and conscious actions. You seldom improve much without giving the task your full attention. It isn't enough to simply follow a teacher's or coach's directions.*" – A. Ericsson

- ☐ I control each session by giving full attention to what I am practicing
- ☐ I focus my concentration on the goals or outcomes of the practice session
- ☐ I monitor fatigue and distractions (I practice good energy management)
- ☐ I use shorter learning bursts during training sessions with short recovery breaks

Immediate feedback

"*Without feedback— either from yourself or from outside observers— you cannot figure out what you need to improve on or how close you are to achieving your goals.*" – A. Ericsson

- ☐ I get immediate and specific feedback to identify mistakes and make adjustments
- ☐ We have eliminated lags or delays in feedback – my feedback is timely
- ☐ I do frequent testing and skill demonstrations that mimic real situations
- ☐ I build mental representations and get feedback on how close I am to them
- ☐ I have learned to get feedback by myself and I frequently monitor my progress

Cycling between comfort and discomfort

"*Deliberate practice takes place outside one's comfort zone and requires a student to constantly try things that are just beyond his or her current abilities. Thus, it demands a near-maximal effort, which is generally not enjoyable.*" – A. Ericsson

- ☐ I believe my brain learns best when it is pushed slightly outside of my comfort zone
- ☐ We design practice sessions to continually push me in and out of my comfort zone
- ☐ I frequently change activities and adjust the degree of difficulty to stay "in the zone"
- ☐ I approach skill development the same way as a bodybuilding does, by "lifting a little more than I can handle", then allowing for recovery

Expert coaching

"*Deliberate practice develops skills that other people have already figured out how to do and for which effective training techniques have been established. The practice regimen should be designed and overseen by a teacher or coach who is familiar with the abilities of expert performers and with how those abilities can best be developed.*" – A. Ericsson

- ☐ I get coaching that provides me with immediate and specific feedback
- ☐ My coach holds me accountable and raises the pressure on me to perform
- ☐ My coach pushes me further than I would on my own
- ☐ The coaching I get ensures new learning builds upon existing fundamental skills

K. Anders Ericsson (1993) coined the term and while researching expert performance for over 30 years. He refers to deliberate practice as those practice activities that maximize improvement throughout the development toward expert performance.

The concept of "the 10,000-hour rule" was also derived from the work of psychologist K. Anders Ericsson, who studied the way people become experts in many professions and endeavors. Malcolm Gladwell in his book "Outliers" in 2008, observed that it takes about 10,000 hours to become a genuine expert in anything. However, this has often been misinterpreted by people to mean 10,000 hours of *any kind of practice*, which is not what Ericsson meant. Dr. Ericsson's point is that the many hours needed to get to elite levels should be focused on *deliberate practice*.

Takeaways for Study Improvement

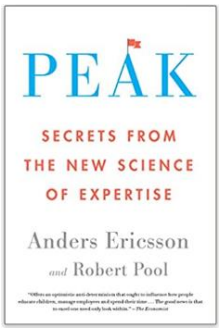
These are the key points you should convey to your child on this subject.

- ✓ **Use deliberate practice when you are stuck at a mediocre level of performance**. From observation, this seems to happen to most people. They train and learn and get better at something, for a time, but then they plateau. And despite their continued training and effort, they don't somehow get better. The way out of this phenomenon is deliberate practice. But first you have to have experience with it and know how to do it. This is why you want to teach this to your kids, and start doing so early.
- ✓ **It's not deliberate practice if you don't fully incorporate all five elements**. These five components can work independently, and all types of learning can benefit by understanding them. Even if you are not trying to reach expert levels of performance, your study and training can benefit from knowing it. But it's not deliberate practice.
- ✓ **Learning should be effortful, and not comfortable**. This may be one of the harder lessons in life to teach kids. There is a price you have to pay to get better at something. There is not a free lunch when you want to improve. Reading without working at it won't get you much better. You can learn to enjoy the process, however, but it takes time. Effective learning is an active discipline, not a passive experience. When you have higher levels of learning maturity, you not only understand this, you embrace it.
- ✓ **Most people get good at something up to a point, then they get stuck**. This is, perhaps, the most striking of Anders Ericsson's insights about learning, even though we observe this in people all the time. And we can even find this in ourselves, should we honestly assess where we are. Realistically, for the many things we need to do, it may be simply fine to be mediocre - that may be enough. But for those things you strive for, those things that are very important to you personally and career-wise, you will need the "know-how" and the capability to reach that expert level. This is where the knowledge of deliberate practice will serve you well. Everyone should experience the personal power that comes through being exceptionally good at something. Sadly, many don't.
- ✓ **"SPICE" connects to many other tools for your learning**. Each of the five components of deliberate practice are part of other valid learning strategies. All types of learning can benefit by understanding these principles. Even when you are not trying to reach expert levels of performance, your study can benefit from knowing it. Learn to do this, then leverage this knowledge to the many learning opportunities.

Resources for Mini-Lessons

Explore a few more resources on deliberate practice with your kids.

1. This is an interesting TED[x] talk on deliberate practice by guitarist Gerald Leonard.
   https://youtu.be/xrl2kR2UdHM
2. A good 7-minute video that provides an overview of deliberate practice.
   https://www.youtube.com/watch?v=uoUHlZP094Q
3. James Clear provides some good examples of deliberate practice.
   https://jamesclear.com/beginners-guide-deliberate-practice
4. Anders Ericsson on focusing your training (1.5 min.)
   https://www.youtube.com/watch?v=GLCLaRNPkIo
5. If you desire an in-depth understanding of this, read Anders Ericsson book "Peak".



Go for it!

> "Sometimes the questions are complicated, and the answers are simple" – Dr. Seuss

You can probably think of many reasons not to teach your kids about deliberate practice. At this point of your learning journey, you likely have many questions.

Can we do this?-Do I understand it?-Is this too hard for my kid?-Can I actually coach this?

But the simple answer will come when you just get started. Find something your child wants to get really good at and go for it! You will learn as you go, you will develop a clear understanding of how to do this--and you will do it well.