



Technical Bulletin - Getting the Most Out of Practice

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We all want to achieve the highest level of performance of which we are capable. As mentioned in the *In Sights* article, practice and training have a big impact on an athlete's performance level. How exactly do we get the most out of practice? How do we train more effectively so that we have high quality practice? How do we practice more efficiently so that we can shoot a greater quantity of arrows? In the great words of Allen Iverson, "We're going to talk about practice. Not the game."

Many factors contribute to the effectiveness of practice. In this article we will look at a few of those factors, namely different types of training activities, different types of training structures and how to be more efficient in training.

Observations of Typical Training

Typically, the average archer does the following training activities: technical form work, blank bale, group scoring (league, JOAD, etc.), individual scoring, and tuning. Most would say these are universally considered to be effective training activities, so much so that they account for the majority if not all of the training activities the average archer does in an entire week. This can create a lot of monotony in practice. When things are monotonous, they can get boring really quick.

In my observations, the typical practice session is a very relaxed atmosphere. Sometimes coaches or athletes play music on speakers to make the environment more enjoyable. Rarely do I see the session and shooting ends run by a timer. The overall atmosphere is comfortable, too comfortable for athletes to learn and be challenged.

While this is okay, to take your performance to the next level, your practices must challenge you to do so. You have to do different things in a different way. Let's take a look at how we can improve some of these common pitfalls.

Being Comfortable Being Uncomfortable

The first thing we can do is view practice differently. Anders Ericsson who wrote the book [Peak: Secrets from the New Science of Expertise](#) explains that deliberate practice is the most effective. Some elements of deliberate and purposeful practice include stretching yourself outside your comfort zone while having specific goals and getting quality feedback. This means practice is challenging to the point that mistakes will happen and should happen. Doug Lemov supports this notion in the book [Practice Perfect](#) and explained that coaches and athletes have to normalize error. Normalizing error means that athletes are challenged to make mistakes, and the athlete responds to those mistakes in a way that supports a growth mindset.

Practice should not be comfortable if growth is to occur. Practice is a learning opportunity and the better we construct that environment to allow learning to happen, the more the athlete will learn. The athlete has to take small risks to continually stretch their abilities. This is also why some athletes perform better in competition as opposed to practice. They are making practice harder than the environment of competition, whereas those that don't typically perform well in competition may want practice to be completely comfortable and they might be more afraid to

take risks. As Lemov explains, it all starts with creating a safe environment where mistakes are even encouraged.

Good ways to make practice more challenging than competition is to rehearse specific scenarios such as being down in a match with three arrows left or needing three good shots to shoot a personal or world record. Coaches can also reduce time allowed to shoot to increase intensity. Studies also show that pressure from others observing can contribute to increased pressure situations. It is good to find ways to get groups of people to observe and watch during different training sessions. Live-streaming events can be a great way to do this!

Efficiency

Most of us are not professional archers. We have jobs, school and other responsibilities. As it was explained in the In Sights article, if we don't have time for quantity, we need quality training to get us to the level we need to be. One simple way to do that is to reduce wasted time. Coaches can easily track how much time is wasted after shooting before retrieving arrows, in transition from one activity to the next, before practice, during setup, etc.

For example, if you don't have a timer or stopwatch set up for each shooting end, you can easily waste another minute or two per end waiting around, especially when shooting indoors. For every 2 minutes wasted, the average archer can shoot 6 more arrows. If you waste 15 minutes at a single practice session, that could be as much as 90 additional arrows you are missing out on in one session. Multiply that times three days a week, shooting 45 weeks per year and that adds up to an additional 12,150 arrows of training you might be missing out on.

Note: one of the biggest time wasters comes from archers and coaches mindlessly scrolling through social media during training. Athletes should avoid cell phone usage at practice!

Mix It Up

Another area in which archers can improve their practice is in how the actual practice activities are structured. Most archers set up their practice activities as a *blocked* practice session, meaning for a block of time or volume of arrows they do one activity. Blocked practice focuses on a single skill through a single drill and can often become boring. For example, shooting blank bale for an hour or scoring 72 arrows would be a blocked session.

Studies into motor learning show that this is beneficial for beginner athletes, *but not intermediate and advanced athletes*, especially in skill retention and performance under pressure. Recent motor learning studies show that *increasing* practice sessions are more effective for intermediate athletes in both those areas. Increasing practice sessions focus on a single skill but through multiple drills gradually increasing in difficulty. For example, an archer could shoot 15 minutes of blank bale with their eyes closed, 15 minutes with their eyes open, 15 minutes aiming at small dots, and 15 at distance blank bale. In the example of scoring 72 arrows, an archer could score the same 72 arrows, but each end, take 5 seconds off the time allowed to shoot, or increase the distance after each end.

Studies have shown that *randomized* practice sessions are more effective for advanced athletes where the practice session focuses on multiple skills through multiple drills in what would seem as a randomized order. Randomized practice sessions force the athlete to stay on their toes and promote learning. Randomized practice sessions can also be more mentally demanding because the athlete does not know what is coming next and is constantly adapting to different stimuli. A randomized practice session may look something like this:

- 12 arrows Shot trainer at distance

- 12 arrows blank bale at distance
- 6 arrows standard scoring
- 12 arrows scoring reduced time
- 6 arrows - one arrow shoot-offs
- 12 arrows - aim off practice at distance
- 15 arrows - elimination match

In the examples provided the same number of arrows are shot but the method in how they are structured is radically different. Blocked training typically allows athletes to perform better in practice whereas randomized training will allow athletes to perform better in competition. For more information on the differences between the different practice structures check out [Attention and Motor Skill Learning by Gabriele Wulf](#).

Summary

Improving the quality of practice takes effort and a willingness to try something new. These are some tactics you can utilize to improve the quality of your practice that will in turn improve your ability to perform in competition.