“Practice makes permanent, not perfect.”
—Warren Buffett

How you practice makes your physical execution permanent. This is what I witness on a daily basis as a coach at the Kegel Training Center. Clients arrive with flawed physical technique based on thousands of hours and many years of habit-forming poor execution. It isn't that these individuals have not invested in practice. Rather, their practice process actually solidifies poor execution. But, in short, it is how you practice, quality over quantity, rather than the time and effort put into the process that will determine how you progress.

In this month’s Slowinski at-large, I share with readers my instructional process to alter flawed physical game execution and migrate to correct technique. This holistic approach is based on what I term Micro Execution Erosion Therapy (M.E.E.T.). Specifically, once flawed technique is detected, the coach’s job is to facilitate the erosion of incorrect technique through the utilization of micro execution drills. My M.E.E.T. process has evolved over time as I have strived to constantly improve my instructional ability as a coach.

As a coach, I am involved in more than 2000 hours of video analysis on an annual basis. Through each analysis session, I have seen how quickly players evolve when making changes. More importantly, I have learned which processes yield the quickest alterations to the physical game. Philosophically, I believe bowlers can improve most quickly through a holistic approach. Through micro execution drills, the change process is more natural with each drill working to stitch together movement change.

**Technique error correction process**

As a guide for coaches and players, I present the process I utilize to foster a physical game change in players. First and foremost, it takes time to change. With this five-step process, you will facilitate the transformation of technique, from inefficient and incorrect execution to a more fluid and biomechanical movement.

Joe Slowinski, a Top 100 coach, is a full time coach at the Kegel Training Center and the Head Coach of the Webber International University bowling program. The Portland Maine native is the former Director of Coaching and Coach Certification for the National Sports Council of Malaysia. Visit his coaching site at www.bowlingknowledge.info, send him questions at joe.slowinski@kegel.net, or start /join a discussion at www.bowlingthismonth.com/btmBB/
**Step 1:**

**Bowler executes shots while the coach videotapes technique**

The objective of Step 1 is to capture the physical execution in a natural manner without the influence of any instruction. Once instruction commences, the individual will change their movement. To see the full extent of the coaching intervention, a baseline video showing how the individual was originally bowling is important. Through this warm-up process, the bowler will reveal the current state of their physical game. Begin by videotaping the bowler as they execute shots capturing a front view, side view, and back view, as well as the release.

**Step 2:**

**Present an overview of elite technique**

To foster the change process, the bowler must first comprehend cognitively what good physical technique is and looks like in top players. Step 2 is designed to provide each individual with a macro level comprehension of the physical game of elite bowlers as well as how movement flows together most efficiently. Specifically, having an accurate mental model will expedite change. Once the individual has the appropriate physical game execution model in their mind, they will immediately begin to reflect on execution and imitate these motions mentally and physically.

To best set the stage for change, present a complete and in-depth overview of an elite physical game. Specifically, illustrate the biomechanically efficient components of world-class technique. This is a sit-down educational session, just as a teacher would introduce a new concept in the classroom. For this phase, plan on approximately 20 minutes. Some of the key components to a great presentation include:
1. Set-up body position
2. Swing slot creation
3. Swing start and upswing
4. Downswing, release, and follow through
5. Hand and elbow position in the downswing
6. The role of timing in energy transfer from the body to the ball
7. The role of timing in creating a swing slot
8. Torso rotation creation and energy transfer
9. Footwork
10. Finish position
11. The contributions of the trailing leg and knee bend to balance
12. Release
13. Follow through direction and energy transfer

**Step 3:**

**Review the bowler’s technique post-presentation**

After presenting a holistic model of a biomechanically efficient physical game, it is time to review the bowler’s technique. With the bowler, review their physical game from all four views: front, back, side, and release. As both of you review and analyze the video clips, ask the bowler to articulate what they see in their game that is flawed technique as related to the biomechanically efficient physical game discussed in the presentation in Step 2. This review process can be either informal or formal, by asking the individual to identify the errors on paper as they watch the video.

After going through each clip several times, review their perceived errors together as you watch the videos again. As you guide them, point out any additional technique problems that you see as well. This will reinforce their developing understanding of an elite physical game as well as provide them with insights from your view.

Be sure to take adequate time in Step 3. This allows the individual to reflect on their new learning about a great physical game as well as see what they are doing that is problematic. It is vital that a mental link be made between their current physical game and the ideal model physical game.
Step 4:
Correction technique articulation

With the new mental model of good physical technique paired with a review of physical game issues, the door is now open to begin the error correction change process. The key to success in this process is to understand the cause and effect sequence associated with the physical game. For example, if an individual bowler with a bad swing is late getting the ball started into the swing or they have very little space for a swing slot, a focus on creating space must precede working on the swing. Since space creation is a requisite for a good swing, this must be the first priority.

Understanding cause and effect sequences are critical for making changes to an individual’s technique and fostering change. Initially, you can ask the individual to model an ideal physical game with an emphasis on the areas of needed change. This also illustrates to the bowler how difficult change will be. Moving away from the current execution and making new technique become automatic.

Step 5:
Overload with Micro Execution Erosion Therapy

After articulating the cause and effect sequences, focus on implementing an overload process of micro execution to build a new execution process. This is intended to erode the erroneous technique, replacing it with an improved physical execution. During the

<table>
<thead>
<tr>
<th>Micro Execution Erosion Therapy Table (a few examples)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Problem Area</strong></td>
</tr>
</tbody>
</table>
| Early ignition of release                              | Downswing, with the elbow moving to the hip, leading the hand to the inside of the ball into release | • Foul line drill (FTD)  
• Through the face (TTF)  
• Swing and slide (S&S) | • Slowinski at-large, 06/11  
• This article  
• Slowinski at-large, 12/08 | Begin with 10-25 of each for one month and move to completing 25 sets of three-in-a-row (i.e., 1X FLD, 1X TTF, 1X S&S) |
| Poor swing                                              | • Space creation  
• Swing direction in the upswing  
• Swing direction in the downswing | • Practice swings  
• Through the face (TTF)  
• Swing and slide (S&S)  
• Back-up drill | • Slowinski at-large, 12/10  
• This article  
• Slowinski at-large, 12/08  
• Slowinski at-large, 03/09 | • two practice swings before each full execution  
• ten consecutive TTF drills  
• ten consecutive S&S drills  
• ten consecutive back-up drills |
| Flawed mental model of the trail leg position or over-rotation of the trail leg leading to the over-rotation of hips as the bowler throws the ball | Drive into the slide and slide leg/knee movement | • Foul-line drill  
• Through the face (TTF)  
• Swing and slide (S&S) with an emphasis on trail leg movement and ending foot position | • This article  
• Slowinski at-large, 12/08 | All emphasizing a good position of the trail leg and knee  
• ten consecutive TTF drills  
• ten consecutive S&S drills  
• ten consecutive back-up drills |
overload phase of micro execution erosion therapy, the bowler will perform drills to improve an identified physical flaw in their game. Micro execution is literally a very-defined isolated physical movement. To illustrate, a swing and slide drill emulates the downswing, slide, and finish in a one-step drill in which you swing the ball.

From my experience, when starting the change process, it is best to begin with several weeks of executing large numbers of each individual drill. Through this introductory period, the practice quality improves and solidifies the execution of the drills.

After several weeks, begin to migrate to a practice process of doing one after another. This can be viewed as a cycle of each individual drill. For example, initially, the bowler would do 25 consecutive of each foul line drill, swing and slide drill, and back-up drill. Afterward, the bowler would complete 25 sets of one foul line drill, one swing and slide drill, and one back-up drill.

The power of the Micro Execution Erosion Therapy is linking the drills together leading to more holistic execution and eradication of the old technique, replacing it with a more efficient physical game.

A new M.E.E.T drill: through your face drill

Through micro execution, a bowler will begin to erode erroneous execution and begin to scaffold new and improved technique. In an effort to introduce the M.E.E.T. concept, I share a new drill with readers, the through the face drill at www.bowlingthismonth.com/extras. It is a very good drill to improve swing line and follow through as well as release or trail leg issues.

Implementing the through the face drill
1. Begin with your back to the pins and take one step away from the foul line.
2. Turn and face the pins.
3. Put the slide foot slightly in front of the ball-side foot.
4. Place the bowling ball at your side with the forearm touching the outside of the ball-side leg.
5. Lean to the outside of the ball-side. Attempt to get your entire head outside the ball, dropping the shoulder in the process.
6. Make certain that the palm and forearm are forward.
7. Push the ball forward. Let it swing. Finish by following through with the forearm directly through the space under the head/face.

Conclusion

In simple terms, it takes time to make change. You can't make change in your technique by simply throwing more and more shots. This will likely cement incorrect physical execution. As the initial quote reminds us, practice makes permanent. From my experience, micro execution erosion therapy is a coaching process that leads to rapid change in players, improving their technique. Since the micro execution drills more precisely mirror efficient movement, a player develops new technique without the torture of traditional error correction procedures.