

When I was asked to contribute to this series I initially declined. What could I possibly add to these distinguished pitching instructors? I re-thought that position when I remembered that my perspective as a teacher could add value to this series.

What I do as a teacher is not much different in this respect than any other coach - train pitchers for better in-game performances. The exception is that I focus 100% on instructing and developing teaching technologies or the best methods to get pitchers to remember information and prepare to perform. Game coaches use that preparation and developmental practice to win games.

But along the way we all use training information like a professor uses a textbook - find the best information available and get your pitcher to do it. The series on pitching mechanics you have read in the recent issues was, I believe, a very successful effort to bring various concepts of the evolving world of pitching mechanics into a comparison. We initially thought the results of the comparison would be widely different and at conflict.

For years now I have believed that if you put 10 well known instructors in a room, they would agree on 85% of most technique topics. The 15% they disagree on can often frame them as celebrity coaches. Most assuredly, the national debate as to the veracity, practicality, and performance of each instructor often dwells on small or minor issues.

To be sure the small and minor issues have a direct link to age appropriateness. 2% issues in a major league pitcher are far different than 2% for a 14 year old. And as we all know, there are far more 14 year olds than major league pitchers.

What I'm saying here is that far more critical discussion (and at times divisive for our profession) goes on about issues that the vast majority of pitchers never deal with or evolve to.

So is there a consensus of thought? Are there basic fundamentals that are old, new or evolving? Where is the meat? What is "take it to the bank, throw me a strike pitching mechanics"? Here is a recap of what was said by each coach.

	Beginning Balance	Moving Balance	Landing	Hip Turn	Glove Side	Arm Action	Follow Thru
Tom House	No static/still balance point	<ul style="list-style-type: none"> Major factor in control Weight forward 	If head goes to plate it is a non teach	Separate hip/shoulders as do hitters	Stops over stride foot. Chest goes to glove	If both arms are equal and opposite it is a non teach	If head goes to plate it is a non teach
Vern Ruhle	Full stop and load	<ul style="list-style-type: none"> Weight back until stride foot lands 	Soft “test the ice”	No comment	Chest to glove	Elevated 90 degrees from torso	Throwing hand finishes above waist
Dick Mills	Full stop and load	<ul style="list-style-type: none"> Chin over belt Vertical balance and control 	90% of height toe to plate	Strong hips power the Shoulders. Acceleration occurs around front leg	No comment	Break hands before belly button	No comment
Paul Nyman “There are no absolutes when it comes to training and instruction (of pitchers).”	No comment	<ul style="list-style-type: none"> Too slow works against pitcher 	A quick stride appears to create added MPH Whatever happens before foot plant retrain what happens at foot plant	Hesitation or pause destroys momentum	No comment	Arm action determines velocity. Shoulders to finger tip sequence is the most important part of throwing	No comment
Mike	No static/still	<ul style="list-style-type: none"> Maximize 	Do not land	Separate	Pull glove to	Long on	Strong

Marshall	balance point	linear motion <ul style="list-style-type: none"> • Elbows on front side of body 	closed. Stride to a comfortable distance	hip/shoulder rotation	chest	backside. See article for many specific details	deceleration increases MPH
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Here's the meat:

The question most coaches ask, from youth leagues to college is, "How can I get more production out of more pitchers while not forgetting to squeeze maximum performance out of my #1 starter?"

Without a doubt, pitching has and is evolving from personal "style" to applied evidence from scientific research concerning the forces applied to the body from throwing a ball off a hill for an extended period of time. From the commentary in their articles in CB, House, Mills, Marshall, Ruhle, and Nyman (but I'm less informed (by his own quote) on what Nyman is for than what he's against) seem to agree on the following:

1. Consistent pitching performance is the art of controlling all aspects of the kinetic chain
2. Beginning balance control. Some say full stop at leg lift, some say non stop, but all agree that problems start here if you are off balance (head not over center of gravity) in any direction.
3. Do not push off rubber to attain speed. Legs do not throw the ball. No one believes drop and drive is a viable method to avoid arm injury and increase velocity
4. Straight spine perpendicular to ground. Nose over navel. Do not lead with hips - shoulders leaning back toward 2nd as you begin the motion to the plate.
5. Controlling balance down the mound essential to control
6. Separate hip rotation from shoulder rotation
7. Control glove side, although they differ in
 - a. Chest to glove
 - b. Glove to chest... but not wildly to 1st (RHP)
8. Extend in a direct line to plate. Release the ball as close to the plate as possible
9. Spine at ball release should be straight towards plate. Eyes level to horizon is essential to locate strikes
10. The lack of core strength and body flexibility can defeat the best mechanical instruction
11. Full and complete deceleration is a major component of increasing acceleration

Let me weigh in on one issue: Communication. No one I know purposely lives to confuse pitchers. The concept of "keep it simple" is certainly taken out of context. Great instructors use a combination of visual, auditory, text, and experiential methods of teaching. We don't teach below the intellectual level of the student. If we did, no one would respect us. We constantly evaluate the player's ability to learn.

Semantics betray our best efforts as a group of professionals. The words get us confused. Over 5 years ago I approached American Sports Medicine Institute with a project form a task force and create a directory of standard pitching terminology. Regrettably they declined. I truly believe if baseball had an industry standard of terminology like the medical profession does, we would eliminate a lot of disagreements, misunderstandings and recrimination.

Pitchers are smart. They have different personalities than position players. They want to know more. They have a need to know “cause and effect” relationships. They need to know “why” as well as “how”.

Some coaches have to deal with language barriers. You can see how words and vocabulary would challenge men from foreign countries.

Young children have not yet amassed a broad vocabulary but their game is not complex. Still, pitchers are smart at any age. Challenge them! But I have never found that **serious** high school and college students, when presented with the importance of cause and effect relationships, rebel against the complexity or the technical details of any facet of pitching instruction.

However, I hear coaches talk about this all the time. It’s my belief that many of the “keep it simple” crowd, are coaches who can’t or won’t learn information based on fact, not opinion.

Often instructors will disagree with each other about another’s drills. Any drill not coached properly or taught for the wrong reason can be misinterpreted. An example of this is seen in comments about the towel drill. The towel drill is not designed to develop arm speed or action. This drill is excellent for teaching timing, kinetic chain, and core stability with a straight spine extension to the plate; mainly because there is no ball in the pitcher’s hand. Without the ball and the subsequent throw, the pitcher can focus on learning and developing the “process” rather than obsessing about the “result” of the throw at that particular moment. It is an excellent tool for training indoors on your own.

It is true that if the towel drill is performed incorrectly, a player can focus on extension too much and alter mechanics, defeating the purpose of the drill itself. But that is obvious and the coach merely re-teaches the drill.

Pitching is not simple. It is difficult. It takes a special type of coach to teach it. Staying healthy, strong and in the rotation takes intelligence, both on the part of the coaches and pitchers. It is amazingly obvious that, while teaching others, the current and future successful coaches will continue to learn and develop their knowledge through scientific fact as opposed to personal styles. There is a world of ineptitude and abdication of solid pitching instruction in the game. It exists because recreational leagues do not require detailed training for coaches and paid coaches think schools over for them and merely repeat old information.

We all hope to find the perfect pitching motion; the one that throws the ball fast, where we want it, and at different speeds and doesn’t hurt the arm. The truth is that’s beginning to happen now. You can read about it!