2-Day Pitching Clinic Instruction Guide

Baseball Positive 2023

www.baseballpositive.com

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Introduction

The learning and development of physical skills is different from academic learning. Physical learning is a slower process requiring doing; repetition. Our brain can consume information and grasp it relatively quickly. Muscles require repetition (and time) to gain familiarity with a movement.

Kids learning the pitching motion is a process of repeating segments of the delivery on a consistent basis over time. Part 1 of the Baseball Positive approach to teaching is a series of 'no-ball' drills. These are designed for the player to develop muscle memory. Muscles repeat actions over and over, day after day, to lock in 'memory' of the movements.

The mechanics of the delivery are quite elementary. This presents a challenge. Kids quickly 'memorize' the parts of the delivery and think because they 'know' the stuff in their brain, it means they can execute the actions with their body. Later, once they establish some level of mastery of the movements, the tendency is to think they are set and don't need to work to maintain that mastery.

The fact is, muscles 'forget' and need constant 'reminding' of the actions throughout a playing career.. The Baseball Positive Pitching drills first train the muscles, then help to maintain the muscles 'knowing'.

Focus On Actions Not Results

This concept is arguably the most important for effectively teaching physical skills.

Desired results come after proper actions are learned through repetition, and then executed at some level of consistency. This takes time. We are teaching players the *actions* of the delivery. As they develop those actions, the frequency of good results will steadily increase. If our attention is on results, we are guaranteed to experience frustration and disappointment. When our attention is on actions, a sense of satisfaction can be felt in each repetition, 'I know what I am doing, I just need more repetition to do it well; I am getting better".

Kids are laser focused on results. When we constantly focus our talk on actions, over time it sinks into our kids' heads that ***getting their actions right is the objective of their work***. A point to keep in mind, and to share with kids, is that skilled veteran pitchers don't get their desired result a fair amount of the time. The secret to success is an actions-based approach for every repetition. Success is defined as achieving the desired result a higher percentage of the time, not all the time.

When a player achieves the desired result, *it is Ok to acknowledge the result*. When doing so, make reference to an *action* that lead to the result.

How do you know which action? As you get into the guide and the teaching process you will see there are about a half dozen core, fundamental actions of the delivery. You will quickly become familiar with those actions. You can pull from one of those in giving feedback. Hint: when a good result occurs, you refer to specific action that is being worked on.

Concepts

Please READ THIS SECTION BEFORE starting in with instruction. These points address our approach to teaching, help us to understand a kid's perspective and/or help with communication. The objective in providing the information in this section is to make the teaching and learning process run a bit smoother and make the experience more enjoyable for you and your player(s).

PATIENCE - MUSCLES TAKE A WHILE TO LEARN NEW ACTIONS

Kids are not going to master these actions right away; and they are not going to get great results right away. When introducing drills to kids, it is important to explain to them that when doing new things there is an initial stage where the actions may feel strange and uncomfortable. This is because the movements are new for their muscles. Muscles don't like new stuff; they like what they are used to doing.

BRAIN IS SMART, IT REMEMBERS; MUSCLES ARE DUMB, THEY FORGET

Physical actions are learned through repetition and FEEL, not through (brain) memorization. The pitching action is, 'Turn, Pull, Snap'. That can be memorized (known in the brain) in seconds. Executing the actions well, takes a bit longer.

THE PITCHER'S HEAD IS THEIR 'STEERING WHEEL'

The head remains still and straight *before*, *during* *and* *after* the delivery. (**pictures p.11**)

A mental concept you might give to a pitcher to help them focus better on keeping their head still: imagine a rope pulled tight from their nose to catcher's glove. With that rope in place, they cannot move their head side to side or up and down.

YOU DON'T PITCH WITH YOUR ARM

The pitching motion involves the entire body. Most kids think only of their throwing arm. When throwing 'all arm', undue stress is placed on the rotator cuff in the shoulder. Also, when most of the effort used in the delivery is focused on the arm, accuracy, velocity and stamina are not maximized.

Telling kids directly, "You don't pitch with your arm!" gets their attention. This statement is entirely contrary to their perspective. While the throwing arm muscles are involved throughout the throwing motion, the arm is the emphasis in the throwing action, only prior to and through release point, at the end of the action.

THE GLOVE ARM IS THE IMPORTANT ARM

Watch the video of Sonny Gray (**p. 16-17**) or any video of a pro or college pitcher. It is clear how the glove arm serves an important role in the full body action of the delivery.

Observe kids throwing. You will see little or no use of the glove arm by. Based on my years working with kids, I can confidently say the non-use of the glove arm is ***the most common flaw in pitchers***, and throwing in general. The glove arm is an aspect of the delivery that needs to be addressed during every training session.

Framework of the Delivery

- Turn, Pull, Snap
- Head straight & Momentum straight

Virtually everything else included in this section (or found elsewhere) fits into the framework of these 5 points

Two other things to be conscious of are:

- Release Point — this is the transition point between the use of big muscles to the use of the smaller muscles
- Power Position — this is the transition point between the stride and the throwing action

These two aspects of the delivery are referenced often in the teaching (mine here; yours on the field)

Drills for Developing the Pitching Action (see pitching drills sheet p.7)

Drills done from the 'Power Position'

Rocking Helps kids gain the feel of keeping their body moving along a straight line towards home plate.
Also used for Rocking Action throwing drills

Lower Half Turn Trains the legs to initiate the throwing action
The Legs turn before the upper body aspect of the throwing action begins
Glove shoulder remains pointed at the catcher during this drill

Turn & Pull Trains the action of the legs turning and glove arm pulling back.
This action initiates the arm action in the delivery; it starts the throwing hand forward
The muscles of the throwing arm remain relaxed throughout this drill
Phase 1 of training the legs in the delivery; first 3-4 training workouts

Drive & Pull Phase 2 of training the legs in the delivery.
Back leg pushes straight forward towards home plate with as much effort as possible.
Incorporate the Anchor of glove arm in the 'Pull' aspect.

Drills done from the 'Out Front' Position

Teeter-totter Throwing arm goes down 12", while throwing-arm leg comes off the ground 12"
Then 'teeter' back to starting position with throwing hand at Release Point and foot on the ground
IMPORTANT: move slowly and maintain a straight line with arm and leg; balance

Snap Accelerate throwing arm down. In doing this, allow the body to execute the Teeter-totter action
Wrist snap initiates the down action of the arm
Chest goes down, as a result of the down action of the arm
Allow the back foot to come off the ground as a result of the down action of the arm
Throwing hand passes the glove-side knee at the end of the action
The energy generated by the arm snapping down, usually results in the pitcher 'falling' forward at the conclusion of the action. That forward momentum should stay in a Straight Line Towards the Catcher.

Wrist Action Pitcher gripping an imaginary ball (or an actual ball, if the circumstances allow)
Fingers on top of the 'ball'; move the wrist slowly up and down simulating the wrist snap at release
Fingers stay on top of the 'ball' throughout the action

90/45 Drill

Purpose of this drill is to help the shoulder muscles learn *the feel* of when the elbows are at shoulder level. The player executes the drill while holding an object in each hand, weighing (ideally) 1.5-2 pounds.

(When teaching the drill to a team in a practice setting, have each player hold a baseball/softball in each hand. After teaching the exercise, ask your players to do the drill at home. Preferably, the drill is done in front of a mirror, so players can see when their elbows are at shoulder level.)

The exercise has two parts:

1. Start with arms in a goalpost position (upper arms at 90 degrees). Elbows level with the shoulders. Forearms extended straight up with hands directly above the shoulders. Extend arms up until the upper arms are at a 45 degree angle. Lower arms down until the elbows are, again, level with the shoulders. Repeat 5x.
2. Start with upper arms extended out to the side of the shoulders; elbows level with the shoulders. Forearms extended straight forward from elbows, with palms facing down. Lower elbows until the upper arms are at a 45 degree angle in relationship to the torso. Raise arms back up, laterally, until elbows are, again, level with the shoulders. Repeat 5x

Ball in Cup Holder

The Wrist Action drill provides huge benefits to a young player. It only takes a few seconds to do a set of 8-10 repetitions. We want to do 4-5 sets of this drill *each day*. The key is to have a reminder to do the drill and a ball nearby when reminded.

Here is what we want to do: Keep a ball in the cupholder of the family vehicle a ballplayer rides in most often. At each stoplight (or other points that occur 2-3 times along a typical drive around town), they pull the ball out of the cup holder and do a set of the Wrist Action Drill.

<u>Benefits</u>:

· Increase coordination of this action, which plays a big role in pitching accuracy
· Develops forearm strength, which impacts velocity
· Trains the wrist to snap in a straight line, which reduces stress on the elbow
...the natural action of the wrist at release is to twist; this twisting action puts a lot of stress on the elbow

‘No Ball’ Drills for Pitching - Baseball Positive

Rocking	**Power Position.** Head straight; straight line through elbow and shoulders. Rock forward and back. Maintain a straight line with home plate.
Lower Half Turn	**Power position.** Turn legs and feet. Maintain straight line through elbow and shoulders.
Turn and Pull	**Power position.** Turn legs and feet. Pull glove elbow straight back. Stop when elbow reaches a point along side of the torso (some may feel more comfortable stopping the pull a bit sooner).
Pull Resistance	**Power position** with hips rotated to target; front shoulder pointing at target. Adult places one hand beneath glove elbow; the other hand on top of the head. Pitcher pulls glove elbow back slowly (adult applies very light resistance). Stop elbow at anchor point. Allow throwing-hand elbow to move forward to a point slightly in front of the torso; hand to Release Point.
Teeter-Totter	**Out Front Position.** Throwing arm moves down 12”. Allow the torso to tilt down as a result of the throwing arm/hand moving down. Allow back-leg foot to come off the ground 12”. ‘Teeter’ back to the starting position. Repeat.
Snap	**Out Front Position.** Snap wrist and arm straight down as fast as possible. The throwing hand ends up passing outside of the glove-side knee. Allow chest to tilt down towards glove-side knee. Allow throwing-side leg to come off the ground. (Full speed. Execute complete Teeter Totter action; chest down close to knee, with back foot coming higher off ground.)
Wrist Action	**Out Front Position.** Fingers on top of ‘invisible ball’. Slowly move wrist and fingers straight up and down.
Down Resistance`	**Out Front Position.** Adult places one hand beneath throwing-hand wrist; the other hand on top of head. Pitcher slowly moves arm down until the throwing hand reaches a spot at, or near, the outside of the glove-side knee. Only the throwing arm moves. The rest of the body remains still.
Stride (‘Snow Angel’*)	**Set Position.** ‘Orchestra Conductor’ action of elbows/arms, out and up to Power Position. Stride-foot reaches in a straight line towards target to a point slightly beyond ‘comfortable’. Finish with torso centered between feet & hands. …’Stride to Balance’. ***Retrace*** the action back to the Set Position.
Leg Lift	**Set Position.** Lift stride leg, slowly, up and back. At completion of leg lift, the stride foot should be even with the back leg. (Hands remain together.) Slowly lower the stride foot down to finish in Set Position.
Down a Slide	**Set Position.** After completing the leg lift, stride towards home plate. The stride foot follows a path as if ‘Going down a slide’. Just before the stride foot lands, it levels out and ‘reaches’ straight out towards home plate. Finish in Power Position.

<u>90-45</u>: Exercises to train shoulder muscles to consistently get elbows up to the ‘Power Position’

- Place a couple of items in each hand that are approx 2lbs; hold in each hand. Or hold a ball in each hand

1. Arms in a ‘goal post’ position with the elbows even with the height of the shoulders; raise elbows up to 45 degrees and back down to 90 degrees.
2. Elbows at shoulder height, 90 degree bend in elbows with forearms/hands parallel to the ground. Lower elbows/forearms down to 45 degrees, then raise them back up to 90 degrees.

<u>Keys</u>

- Head remains still and centered
- Keep movements in a straight line towards the target
- Palms ‘facing away’ in power position

Stride **Power Position** **Release Point** **Snap (Finish)**


Teaching Phrases

The fundamental aspects of the delivery are associated with a specific word or phrase. Optimum learning is a result of clear, meaningful communication. The teaching phrases are the foundation of the instruction process.

Core Phrases (all players should clearly understand what these mean/refer to)

Release Point	Approx. 12" in front of head; much of the teaching relates to Release Point Head (**pictures p.18**)
'Out Front' Position	Many drills start with the throwing hand at Release Point; throwing hand 'out front' of head
Power Position	Elbows as high as shoulders; feet wider than hips (**pictures p.14**)
Head Straight	Before, during and after the delivery (**pictures p.11**)
Straight Line*	Used in reference to most key actions in the delivery
Turn and Pull	Focuses the pitcher's attention on the Power Phase; legs and glove elbow working together
Drive and Pull	One a pitcher gains a sense of using their legs to throw and establishes the coordination of the legs initiating the throwing action, immediately followed by the glove elbow pulling back, they progress to focusing on the back leg driving forward (in place of the focus of the legs 'turning'). When a pitcher drives forward with their back leg and pulls back with their glove elbow, those two actions combined results in the turning action of the legs.
Pull and Snap	Focus on the movement sequence of ***first*** pulling the glove elbow back, to get the throwing 'out front', ***then*** snapping the throwing arm down.

Additional Phrases (important, but secondary to the above)

Stride to Balance	The torso is centered between the feet at the end of the stride (**pictures p.13**)
Anchor (**pictures p.17**)	Pull action of the glove arm comes to a stop at the side of the torso (stabilizes front side of the body)
Fast-Faster	Coordinating the cadence of the Pull action, followed by down acceleration of hand/arm
Controlled Stride	While the throwing action is an explosive, accelerated action, the stride is a slow, deliberate action
Glove Elbow	Up to shoulder level during the stride; Pulls straight back from Power Position
Teeter-totter	Reminder for the pitcher to better finish their delivery; accelerate arm more; chest over knee
Snap Down	When kids become unsure, usually the first thing they do is ease up their arm speed

*Straight Line

Most actions of the delivery work in a straight line towards the catcher. Referring to 'Straight' or 'Straight Line' in conjunction with a given aspect of the delivery is a simple and effective way of 'reminding' your pitcher during a workout. Below is a list of core aspects of the delivery. After a couple of workouts, your pitcher(s) will be quite familiar with these aspects of the delivery. A pitcher can apply this input without thinking. These can also be used between pitches during a game (see Game Day Reminders - p.5). These are not used for 'teaching', they are 'Reminders' to get a pitcher back on track.

Straight Line:

Head Straight

Drive straight with the back leg

Pull (**Glove Elbow**) Straight back

Stride: Reach Straight

Arm: Snap Straight down

Wrist/Fingers: Snap Straight down

Sequence of Actions in the Delivery

Below is an outline of the delivery from beginning to end. This section is to serve as a reference for understanding, not to be memorized. The 'No Ball' drills (**p.7**) train the pitcher's muscles, piece by piece, to execute the delivery.

The pictures on **pages 11-19** illustrate each aspect of the delivery.

Head (**p.11**)

The head remains *straight before, during* and after the delivery. The scenario I present to kids: imagine there is a rope stretched from your nose to the catcher's glove. The rope is pulled tight. Regardless of the movements the rest of your body makes, your nose (head) stays locked on the catcher's glove.

The body follows the head. If the head gets off-line, the delivery) goes off-line. The 'secret' to success is the head.

Set Position (**p.12**)

Encourage kids to ditch the wind-up and work from the set position. Less moving parts means less chance for mistakes.

Stride (**p.13**)

A slower (than the rest of the delivery) and controlled action. The pitcher wants to 'reach' with their stride foot, straight towards the catcher. This sounds obvious, but making a conscious effort to stride straight can significantly improve a pitcher's body control.

The hands separate as the feet separate. The elbows swing out and up in an arced 'U' shaped action (like an orchestra conductor), leading the separation of the hands. The elbows reach shoulder height (Power Position) a bit before the stride foot lands.

We want the pitcher to 'stride to balance'. Their head and torso are 'centered' between their feet at the completion of the stride. A common mistake in youth pitcher is finishing their stride with their head and torso leaning forward, out over their front foot.

Power Position (**p.14**)

Both elbows at shoulder height (a small percentage of pitcher get their elbows a bit higher than their shoulders). This is critical for older pitchers (10-12). It's a bit tougher for younger kids (8-9) who have limited body strength.

With the throwing arm elbow at shoulder height, it is free to move forward during the 'Turn & Pull'/'Drive & Pull' action. When the elbow does not get to shoulder level, the arm tends to go 'around' the body, which disrupts accuracy. The pitcher loses power, leverage, arm speed, and the ability to throw 'down' to the catcher. Most significantly, delivering a pitch when the elbow does not reach shoulder height, they often put undue stress on the elbow and shoulder.

Lower Half Turn (**p.15**)

As the stride foot lands the lower half of the body (legs & hips) turn towards home plate. While this action occurs the upper body remains in a power position, with the line through the elbows and shoulders remains pointed at home plate.

Turn & Pull | Drive & Pull (p.16)
The sequence of the 'Turn' action of the legs and the 'pull' of the glove arm occurs in quick succession. The 'pull' action of the glove *elbow* takes place when the stride foot lands. The elbow pulls straight back, remaining close to the torso.

The back legs drives hard towards home plate to initiate the *Turn* action.

When training young players, we first train them to *Turn* and pull. Step 1 is to create **awareness** that the legs are an important part of the throwing action. After they gain a sense of the use of their legs (4-5 training sessions), we then teach the Drive action.

Anchor (p.17)
The 'pull' action of the glove elbow comes to a *dead stop*. When the elbow reaches the torso. This is not exact for all pitchers. Some complete the pull a bit prior to the elbow reaching the torso. A smaller percentage will complete this action with the elbow a bit further back in relationship to the torso.

This stopping point is the glove arm 'anchoring' the front side (glove side) of the body. This stabilizes the front side, enabling the energy created in the Drive & Pull action to be directed straight towards home plate.

Release Point (p.18)
Effort of the throwing arm is the third part of the throwing action. The throwing arm elbow moves forward as a result of the Turn/Drive & Pull action. A pitcher completes the 'pull' action before initiating the 'snap' down action of the throwing hand/arm.

The completion of the action of pulling the glove elbow back results in the throwing arm elbow moving to a point in front of the body, which moves the throwing hand to a point approximately a foot in front of the head. This is the pitcher's Release Point.

At Release Point the wrist (and fingers) snap straight down.

Snap Down | Teeter Totter (p.19)
At the completion of the Drive & Pull action, the torso is tilted forward a bit and is positioned closer to the front foot. The throwing-arm elbow and hand are 'out front' of the torso and head. The Down 'snap' of the wrist takes place.

The arm follows the wrist snap in an action 'straight'***** down towards the ground. The arm and the torse represent the front part of the 'Teeter Totter'.

As the arm and torso move down, the pitcher allows their back foot to come off the ground. The back leg is the other end of the 'Teeter Totter', going up.

Momentum Straight (p.25-26 - Sonny Gray video)
All the actions of the delivery are a straight line. (The action of the hips and torso turning is a result of the back leg driving *straight* forward and the glove elbow pulling *straight* back.) As the pitcher is snapping down with their throwing arm and completing the Teeter Totter action, their momentum continues in a straight line towards home plate.

[We may observe older, more powerful pitchers 'fall off' to their glove side after completing their delivery. This is a result of the throwing hand finishing its down action outside of the glove-arm knee/leg. This action turns the torso to a 45 degree angle to home plate.

However, this 'falling off' occurs after the pitcher fully completes the Teeter Totter action and Down action with the throwing hand and arm]

Head: Still and Straight, *before, during and after* the delivery

'Set' Position (glove side of body facing catcher)

Encourage kids to pitch without a wind-up* and leg lift. The more moving parts, the more chance for flaws. However, some kids use those actions for rhythm.

If a pitcher wants to incorporate either of those into their delivery, we want them to demonstrate they can maintain balance and body control to the completion of their stride.

Finish the stride in a Power Position, so they are prepared to execute the throwing action as well as possible.

* **Why Baseball's Best Pitchers Are Ditching the Windup**

…Why? It has a lot to do with the health factor. Per the WSJ story, "some believe the windup only creates ***excess movement***, offering more opportunity for ***something to go awry***." It could even be a way to avoid poor play. "Without the extra and unnecessary motion, they can ***more easily replicate their mechanics***, lead-

Stride — ‘Stride to Balance’ (Centered)

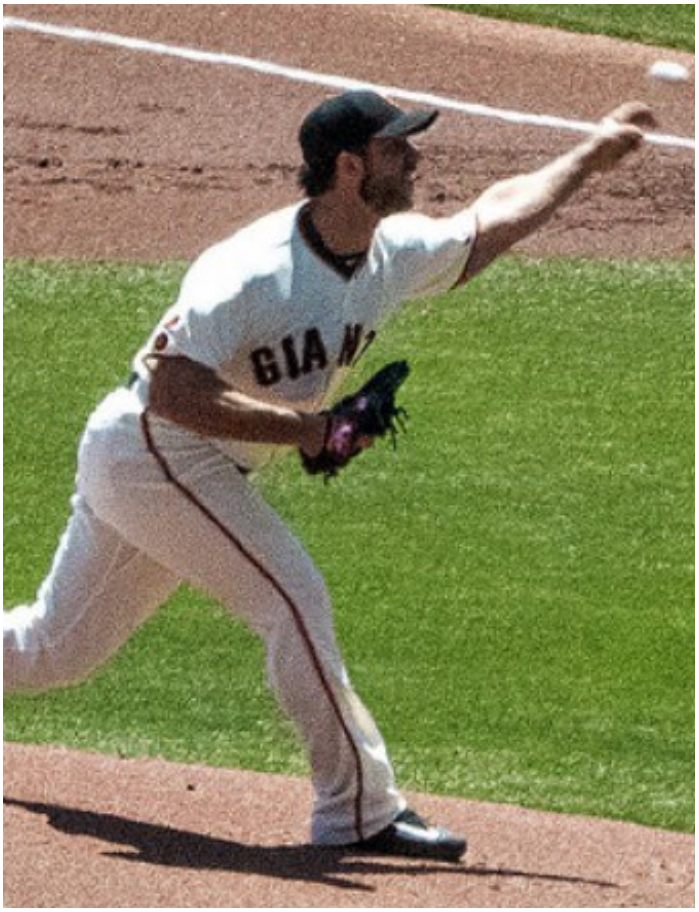
Power Position

Lower Half Turn - Pitching

Turn & Pull | Drive & Pull

Anchor

Release Point



Teeter Totter | Snap Down

Progression of Teaching

Teaching Activities Progression

1. No Ball Drills
2. Rocking Action Drills - 30'-35'
3. Controlled Stride Focus - 30'-35' (approx. 5 reps prior to full distance pitching)
4. Entire Delivery, Short Distance - 30'-35'
5. Entire Delivery from Longer/Full Distance - 15-20* pitches to wrap a workout or pre-game prep
   * older players who throw more than a Fastball and Change-up will 20-25 pitches full distance)

No Ball Drills

- The full set of drills is done each day at home - takes 2 minutes
- Prior to every session of Pitching Practice (Bullpen), do the full set of drills; sets of 5 instead of 10
- Teams want to make this part of part of each practice. Invest 60 seconds before playing catch
  —-> pick 2 or 3 drills and do 5 eps of each; all 12 players do the drills.

Pitching Using Rocking Action

These are done from short distance, 30'-35'. Focus on either the Turn & Pull aspect or the Pull-Snap portion of the delivery. Within that part of the delivery, pick a more specific point of focus; see list of examples below. The reason for this activity is to isolate the arm action by taking the stride out of the delivery.

Turn & Pull	Pull-Snap
Head Straight	Head Straight
Anchor Glove Arm	Anchor Glove Arm
Leg Turn emphasis	Down Action of the Arm
Leg Drive emphasis	Wrist Snap
	Fingers: Straight down through the top of the ball

Controlled Stride

When transitioning from work using the Rocking Action to the Full Delivery, have a pitcher throw 5-6 pitches with a Controlled Stride as the only entire focus. This series of pitches gives our pitcher a few moments to set the cadence a controlled stride. Also, reaching straight with their stride foot and finishing the stride balanced and in a good power position.

Entire Delivery - Short Distance

Much of our pitching practice, when using the Full Delivery (including the leg lift and stride), is done from 30'-35'. From this distance the concern of 'just getting the ball to the plate' is reduced or eliminated. The pitchers can focus their full attention on executing the actions of the delivery as well as possible. This is especially important for younger kids and players new to pitching.

Early in the training process of a pitcher, we want to have all Full Delivery work done from short distance. The primary focus when working on the Full Delivery action is the **cadence/rhythm of the delivery**.

The stride phase is slower and drawn out a bit. When the pitcher is finishing their stride the delivery action speeds up and accelerates through the end of the action.

If we verbalized the pace of the delivery, it would go like this: "Striiiiiiiiiiiiide, Pull-*Snap!*" or "Slooooooooooow, Fast-*Faster!*"

Entire Delivery - Full Distance

If it's not the middle of the season, do all throwing work at short distance of a few weeks before working at full distance. Take this time to get the mechanics of the delivery as solid as possible. As the start of season nears, more time is dedicated to Full Distance work. Still the majority of the time dedicated to pitching practice will be Drills, throwing using the Rocking Action and Short Distance work using the Full Delivery.

Younger and less experienced players, when the time comes to stretch out the distance in pitching practice, do not jump up to full distance immediately. Stretch the distance 2-3 feet each workout, working up to full distance.

Each workout, before pitching from full distance, make it a habit to throw 5-10 pitches, focusing on rhythm/cadence, from short distance.

Training Using the Rocking Action

We want to be clear when doing the Rocking drills, is that accuracy is not the focus of the activity. When doing these drills a pitcher needs to ***focus on the specific body movement they are training***. Over time as the pitcher's consistency in each piece improves, those pieces will start blend together to create a solid throwing action.

This is not to say a pitcher won't throw some great pitches. They need to understand the objective is their good ***actions, not results***. Good results will come later, as a result of them executing good actions.

The throwing motion has three parts:

1. Turn
2. Pull
3. Snap

When working using the rocking action a pitcher is focusing on coordinating two of the three parts, either:

- Turn & Pull | Drive & Pull
  or
- Pull & Snap

When pitching using the Rocking Action, a pitcher starts in a Power Position (with palms of the hands facing away from them). They rock forward towards the catcher, then rock back, then throw. An important part of the action is Rhythm:

- "Rock...Rock...Turn & Pull" (Drive & Pull)
  or
- "Rock...Rock...Pull-Snap"

When working using the Rocking Action, have a pitcher throw 5-10 pitches working on one focus point. Then move to a new focus point. We don't go though all the focus points in one workout.

'Turn & Pull' ***focus points***

- Coordinating Turn & Pull
- **Head** remains straight then entire action, and until the ball arrives to the catcher
- Extra emphasis on the Legs
- Extra emphasis on the glove-elbow Pull
- Emphasis on ***driving forward*** with the back leg*****
- Emphasis on ***anchor*** with the glove arm*****

'Pull-Snap' ***focus points***

- Coordinating Pull-Snap
- Emphasis on ***anchor*** with the glove arm*****
- Extra emphasis on the arm snapping straight down (Teeter Totter)
- "Head straight forward, Elbow straight back"
- Emphasis on the Wrist Snap
- Emphasis on the fingers snapping straight down through the top of the ball*****

A pitched ball travels on a down angle from Release Point to the Catcher. When throwing from short distance, most all kids can throw on a down angle. We want all kids throwing on a down angle while doing the Rocking Action. If a player does not have the strength to throw down while Rocking, we shorten the distance until they develop their strength and skill.

Training the Stride

We teach the stride *after* teaching the throwing action.

Spend 3-4 days (or more) working only on the throwing action: No Ball drills and pitching using the Rocking Action. The reason is that many kids are out of control and/or out of balance by the time they complete their stride. If we try to teach the throwing action with the kids striding, they likely will not be in a good Power Position from which to execute the throwing action well.

Also, the discipline of body movement they learn during the throwing action instruction helps them quickly grasp the key component of the stride: moving under ***control***.

At this age level the primary objective of the stride is for the pitcher to be in a solid, balanced Power Position at the completion of the stride. With that said, we are also working to make the stride the first part of an overall rhythmical delivery action.

See the description of the Stride action on **p.9**, and the reference to it on the next page, 'Cadence of the Delivery'. Also see the bottom p.11 for a link to an article titled, 'Why Pitchers are Ditching the Wind-up'.

My personal feeling regarding the stride is for kids to **stride without using a leg lift**. The leg lift doesn't help a pitcher throw faster (maybe 1 mph). It does, however, incorporate more movements in the delivery. The more pieces in an athletic action, the more opportunity for something to go wrong.

But, there is an exception to every rule…

Some kids have something in them that tells them they need the leg lift as part of the rhythm of their delivery (this is different from the kids who want to do a leg lift to 'look like the pros').
...for the kids who want to look like the pros, we point out that pro pitcher use a 'Slide Step' instead of a leg lift, All The Time!
(when a potential base-stealer is on first base, pitcher often ditch the leg lift in order to delivery the ball to home plate in less time, so to give the catcher a better chance of throwing the base-stealer out)

A compromise we might propose: only raise the stride foot up to ankle height, or mid-shin.

Training the Stride Using a Leg Lift

Drill #1 - 'Up and Down'
Starting in a set position, the pitcher slowly (under control) lifts their stride foot up, then slowly sets it back down. The key piece is when they lift their stride foot, they also bring the foot back so its even with the back leg. Repeat 5x.
Allow a pitcher to practice this for a few days. If a pitcher cannot bring the stride foot back to even with the back leg, they don't yet have the strength to use the Leg Lift in their stride. (This is not scientific. It's a simple 'test' that can be used to discourage a pitcher from using the Leg Lift.)

Drill #2 - 'Down a Slide'
The path of the stride foot, when using a leg lift, is like going down a slide. The stride foot goes down and out at approximately a 45 degree angle, like a slide in the park. Just before the foot is going to strike the ground, it levels out and extends out toward home plate. A slide in the park doesn't send a child crashing into the ground. It levels out at the bottom.

Practice the stride with a leg lift the same as a regular stride (**p.9**) without a ball. The pitcher 'strides to balance', finishing in a Power Position. Retraces their movements taking them back to a Set Position, then execute another stride.

Cadence of the Delivery

The delivery has three parts: 1) Stride 2) the Turn & Pull action 3) the downward Snap of the arm, which initiates the Teeter Totter action.

Each has a different speed. We'll consider the speed/effort put into each part by using a scale of 1-10; 1 being slowest and 10 being full speed. The Stride is a '4' (Slow and Controlled). The Turn & Pull action ('Pull') is an '8' (Fast and powerful). The Snapping down action of the arm is a '10' (Faster/Accelerated).

When we observe the delivery we want the following terms to resonate. The pitcher is under 'Control' of their actions while they stride. We see them clearly generating 'Power' during the Turn & Pull segment. The arm clearly 'Accelerates' when moving down from Release Point.

The chart below illustrates the three parts of the delivery. Some players will relate better to the numerical tags for each part of the delivery: '4', '8', '10'. Others will respond better to the descriptive words: 'slow', 'fast', 'faster'.

The Delivery Has Three Phases/Parts**:**

Part	Speed	Kid Terms	Coach Terms
1. Stride	4	Slow	Control
2. Pull	8	Fast	Power
3. Snap	10	Faster	Acceleration

The three phases/parts of delivery are not each an equal third. The stride takes up 'half' (or more) of the time of the delivery execution. The second two parts take place much quicker. The 'pull' of the glove arm (middle part) is a 'Fast', powerful action. The snapping down of the throwing arm is an accelerated ('Faster') action in relationship to the middle part of the delivery.

When training a pitcher it can be very helpful to verbalize the three parts to the pitcher to illustrate the cadence of the delivery:

Verbal Rhythm (used by Coach, illustrating cadence of the actions)

- 'Striiiiiiiiiiide…... Pull-*Snap*'
- 'Fouuuuuuur…. Eight-*Ten*'
- 'Slooooooow…. Fast-*Faster*'

…each is communicating the same thing; and are interchangeable.

The terms 'Turn' and 'Drive' are not included in the verbal rhythm. The just don't fit in rhythmically. We make sure the pitcher understands that the legs are a significant aspect of the middle, Power phase of the delivery.

Note 1: the 'Drive' of the back leg (middle part) actually begins at the tail end of the Stride (first part). Just before the stride foot lands the pitcher drives forward, hard with the back leg. As the stride foot lands, the pitcher executes the 'Pull' (& Anchor) action. When the glove arm anchors, the snapping down (Acceleration) of the throwing-hand wrist (& arm) begins.

Note 2: training/coaching the use of the glove arm is the most difficult for a coach. Most kids have never used their glove arm during the delivery (most/all) never considered the glove arm as having anything to do with pitching or throwing. Therefore their muscles are unfamiliar with this action. It takes time for the muscles to learn the proper movements of the glove arm. By far, the most common flaw in youth pitcher is the lack of use of the glove-arm.

Pitching Mechanics Video - Sonny Gray

This **video** shows the delivery from two angles. The first is from the catcher's view; the second is a side view. Different points in the delivery are noted throughout the video. There are many benefits in watching this video. Most important is it reinforces the instruction in this guide. My hope is by seeing each aspect of the delivery demonstrated by an accomplished MLB pitcher, coaches can present the material to players with confidence. When we teach with conviction, players trust us, better follow our instruction and improve quicker.

Straight On View

Start at 0:15 (he's just standing there until then)

0:15 **Head** is straight, focused on the catcher …Before, During and After the delivery

0:25 **Stride** is perfectly straight.

(He's a seasoned pro. Kids aren't going to be perfect. However, this is an illustration of what we are working towards)

0:28 **Power Position** - elbows are a bit higher than his shoulders. This is common in 'adult' pitchers who have achieved a greater level of body strength than a kid pitcher. The take-away is that we want our kids to strive for getting their elbows up to shoulder level as often as possible.

Take Note: his elbows get to shoulder height a hair *before* he finishes his stride. Many kids get their elbows to shoulder height a bit late.

0:29 **Glove Elbow** Straight Back - note that once his glove elbow is pointing back towards second base, it continues straight back.

(Early in the action it appears that the elbow is moving somewhat to the side …that is because his torso is still rotating. The thing to note is that he is in control of his glove arm and keeps it fairly close to his body during this rotating action [which is initiated by the legs]. Recognize that this is very slow motion. The glove elbow's pulling action takes place in a fraction of a second at full speed …a pitcher 'pulls his glove elbow straight back'.)

0:30-

0:31 **Arm Works Down** - also, the momentum of the arm accelerating down pulls the chest down, so it is facing the ground, Not the catcher.

(We don't expect a young pitcher to get entirely to this point with their chest facing the ground. This part of the video illustrates what we are striving for; if a young pitcher can make some progress toward achieving this position after release, they will see improvement in velocity and accuracy …and will relieve stress on their shoulder and elbow joints.)

0:32 **Teeter-Totter** - Its important to recognize that his back leg comes off the ground because of the momentum of the throwing arm accelerating down. He doesn't try to lift the back leg up …it just happens.

(Many young pitchers lack the strength in their torso and legs to allow their back leg to come off the ground much, if at all. Doing the Teeter-Totter and Snap *drills* throughout the winter will build strength in their torso and front leg [and increase body control and coordination]. The result of continued practice of these actions: our young pitchers will increase their capability to execute Phase 3* of the delivery. - *see the drill sheet sent following Day 1)

0:33-

0:37 **Momentum Continues in a Straight Line**, towards the catcher, after finishing the delivery

Side View

Take Note: Sonny Gray is a starting pitcher, but begins his delivery from a 'Set' position, like we do in class. His 'wind-up' consists of a tiny little step before going into his leg lift and stride.

In over a decade of watching kids pitch, I've seen so many deliveries break down during the **wind-up** and **stride**. That is why we work from a 'Set' position; and why we waited until the second day to teach the **stride**, and spent time practicing a 'Controlled Stride'.

0:58 Stride - Hands and Feet separate at the same time.

1:01 Power Position - elbows are a bit higher than his shoulders.

1:02 Stride to Balance - his torso is **Centered** at the end of his stride. He is balanced, under control of his body movements, and is in a perfect Power Position. *He has set him self up to have the best possible chance to execute his throwing motion well*.

'**Palms Away'** - his throwing hand palm is a little past 90 degrees (but not to 180 degrees), but it is 'pointing away'.

(His glove hand palm is 'pointing away' a bit earlier in the 'orchestra conductor'/'snow angel' action with his arms. - Every-one is a bit different, as has been pointed out, and the look and timing of their actions will vary a bit.)

1:02-1:04 Acceleration - begins when his pitching hand is even with the side of his head.

You *may need to watch this a few times* to train your eyes. His arm and hand speed up a great deal from his ear to release point and down through release point.

(First, try to Stop the video when his throwing hand is even with his ear …and watch from that point a couple times. Then watch from a point, in the delivery, just prior to the throwing hand being at his ear. Watching from these two points (hopefully) you will recognize when the acceleration starts...and see the acceleration.)

Take Note of his throwing hand coming up under his left arm pit (1:05) and slapping his torso ….seeing this gives you a sense of how much acceleration he generates at the end of the delivery. The *effort* ('10') put into that acceleration is DOWN from Release Point.

Additional Points

Leg Lift - while the leg is being raised, it goes back a bit as part of a slight inward turn of the torso. We teach kid pitchers, during their leg lift, to try to get their stride foot back to where it is even with their drive (back) foot. As pitchers get older and stronger, they will be able to rotate back more during their leg lift.

(Many young pitchers are unable to rotate back, and get their stride foot back, to any degree; they can only bring it straight up. That is nothing to be concerned with. When working with young pitchers, in many cases, we keep the leg lift out of the pitching action entirely. We have them stride straight out ['Slide Step'].**)**

Anchor the Glove Arm - note that he finishes the glove-elbow-pull action with his glove arm pretty much at the side of his torso … then the pulling-back action Stops. This stopping of the glove arm action is Anchoring The Glove Arm. This stabilizes the front side of the body, which makes maximum power generation and arm acceleration possible.

Just In Case You Notice

There are some aspects of his delivery that vary slightly from, or expand upon, what we are learning. These are because we are looking at very strong adult, who is able to accentuate some of the movements because of his strength. Also, through years of training, he has all his movements in good rhythm, resulting in his body being in good alignment at the key points of the delivery.

There are a few aspects of the delivery that we are not addressing in the clinic. Some are not taught because they require 'adult' levels of strength. Some are not taught because there is only so much a young player can consume in two sessions.

Pitching Workouts

The suggested progression through the workouts below is generic; use it as a guide (this is good plan, however ;)). Depending on the age and experience of your player, you may run them through more or fewer workouts at each stage. If you have an older or more experienced pitcher, you might choose to start at Phase 2. If working with an older or more experienced pitcher, still go through at least on workout at each phase.

Depending on how often (daily vs taking days off) your player works out and how quickly you choose to progress through each phase, the first week or two do not involve the full pitching motion. The first two phases focus exclusively on training the arm action in the delivery. The emphasis in these phases is learning to incorporate the entire body to generate energy and power for the arm action.

Phase 1 Workout - **Repeat 1-2x** before moving to Phase 2 (add Pull Resistance Drill, starting with second workout)
Content: Turn & Pull action introduced

No-Ball Drills done from a 'Power Position' (**pictures p.14**) - 10x each

Play Catch

- Head Straight - 10x
- Glove Elbow: Up and Pull - 15x

Rocking Action Pitching - Turn and Pull Focus

Specific points**:**

- **Coordinate Turn of Legs and Pull of Glove Elbow** - 10x
  —> First five just Legs and Glove Elbow
  —> Second five, add 'Head Straight' as a focus point
- Emphasis: **Fast Leg Turn** - 10x
- Emphasis: **Glove Elbow Pull** - 10x
- Coordinate: **Turn & Pull** (Again) - 10x
  —> increase in effort of the legs and glove elbow than first round

Warm-up Throws: 25
Rocking Action Pitches: 40
Total Throws: 65

Total Cumulative Sessions: 1-2

Daily Drills: Begin 'Drills done from the Power Position', 10x/each, in addition to, and separate from, Throwing Workouts

Phase 2 Workout - **Repeat 2-3x** before moving to Phase 3 (add Down Resistance Drill in second workout)

Content:

- Wrist Action introduced
- Pull-Snap action introduced

No-Ball Drills: - 5x each
from the 'Power Position' (**pictures p.14**)
From the 'Out Front' Position (Release Point) - **p.18**
Wrist Action to drill

Play Catch

- Head Straight - 10x
- Glove Elbow: Up and Pull - 15x

Rocking Action Pitching
Turn & Pull segment:

- **Coordinate Turn of Legs and Pull of Glove Elbow** - 10x
  —> First five just Legs and Glove Elbow
  —> Second five, add 'Head Straight' as a focus point
- Emphasis: **Fast Leg Turn** - 5x
- Emphasis: **Glove Elbow Pull** - 5x
- Coordinate: **Turn & Pull** (again) - 5x
  —> increase in effort of legs & glove elbow than first round

Rocking Action Pitching
Pull-Snap segment:

- Emphasis: **Glove Elbow Pull** - 5x
- Emphasis: **Arm Action Down** - 10x
- **Coordinate Pull-Snap** - emphasis on Head Straight - 10x

Warm-up Throws: 25
Rocking Action Pitches: 50
Total Throws: 75

Total Cumulative Sessions: 3-5

Daily Drills: Begin doing **all** drills, 'Power Position' and 'Out Front' Position 10x/each on non-pitching workout days

Phase 3 Workout - Repeat 2-3x

Content:

- Drive action introduced: 'Drive & Pull'
- Resistance Drills Introduced
- 'Cup Holder' Introduced

Play Catch

- Head Straight - 10x
- Glove Elbow: Up and Pull - 15x

No-Ball Drills: - 5x each
add **Drive & Pull** following Turn & Pull
add Resistance Drills

Rocking Action Pitching :
Turn & Pull segment:

- **Coordinate** Leg **Turn and Glove Elbow Pull** - 5x
- Emphasis: **Fast Leg Turn** - 5x
- Emphasis: **Glove Elbow Pull** - 5x
- Emphasis: **Drive** & Pull - 10x

Pull-Snap segment:

- Emphasis: **Glove Elbow Pull** - 5x
- Emphasis: **Arm Action Down** - 5x
- **Coordinate Pull-Snap** - emphasis: **Head Straight** - 5x
- **Coordinate Pull-Snap** - emphasis: **Wrist Snap** (leads arm action down) - 10x

Warm-up Throws: 25
Rocking Action Pitches: 50
Total Throws: 75

Total Cumulative Sessions: 5-8

Daily Drills: Continue 10x/each on days you don't do Throwing Workouts
add: Pull Resistance and Down Resistance drills ...can limit these to throwing workout days

Ball in a Cup Holder (**p.6**) - in addition to daily 'No Ball' drills, do an additional 4-5 sets (x10 each set) of the 'Wrist Action' drill each day:

- Improves accuracy
- Strengthens forearm muscles (increased velocity and coordination)
- Proper wrist action reduces stress on the throwing elbow (arm health)

Phase 4 Workout - Repeat 2-3x

Content:

- 4-Seam Grip Introduced
- Glove Arm Anchor introduced
- Stride Introduced
- Rhythm/Cadence Introduced

Play Catch to Warm up (4-seam grip for all throws ...and forever, moving forward)

- Head Straight focus - 5x
- Glove Elbow: Up and Pull - 10x
- Wrist snap Focus (leads arm action down) - 10x

No-Ball Drills: All 'Power Position' and 'Out Front' position (**no Resistance Drills**) - 5x each

Rocking Action Pitching

Turn & Pull segment:

- **Leg Drive** focus - 5x
- **Glove Elbow Pull** focus - 5x
- **Power Generation** focus
  (Drive and Pull with increased effort), with **head straight** focus added - 5x

Pull-Snap segment:

- **Anchor** Focus - 10x
- **Arm Action Down** focus - 5x
- **Wrist Snap** focus (leads arm action down) - 5x

New Drill - Stride to Power Position ('Snow Angel') - 10x

Pitch from Set Position, focus on **Controlled Stride**: (30'- 35')
...Striiiiiiiiiide, Throw (no concern with mechanics for these throws) - 5x

Rhythm/Cadence (4, 8-10 | Slow, Fast-Faster | Striiiiiiiide, Pull-snap)

Full Delivery, Short Distance (30'- 35') from Set Position, focus on **Rhythm/Cadence:**

- Correct speed in each phase (4, 8-10 | Striiiiiiiide, Pull-snap) - 15x
- Timing of **'Stride, Pull'** focus ('4', '8' | Stride slow; Pull fast) - 5x
- Timing of **'Pull-Snap' acceleration** focus ('8' - '10' | Pull fast, Snap faster) - 5x

Warm-up Throws: 25
Rocking Action Pitches: 35
Full Delivery Pitches: 30
Total Throws: 90

Total Cumulative Sessions: 7-11

The **Drive** of the back leg occurs just prior to landing the stride foot.
The **Pull-Anchor** occurs as the stride foot lands

Daily Drills 10x/each on days you don't do Throwing Workouts ...now including 'Stride' and '90/45'

<u>Phase 5 Workout</u> - Repeat 2-3x

Content:

- Rhythm/Cadence - more in-depth focus

<u>Anchor is now a part of every throw; endpoint of the Pull action</u>

No-Ball Drills

- Power Position with **Anchor focus**
- Out Front position: be sure **Glove Arm is at the Anchor position**

(Resistance Drills are no longer part of the workouts; do them from time to time as 'maintenance')

Playing Catch and **Rocking Action Throws**

- same routine as Phase 4 workout, with **anchor focus on all throws** that have **Pull** as a focus

———

Pitch from Set Position, focus on **Controlled Stride**: (30'- 35')

...Striiiiiiiiiide, Throw (no concern with mechanics for these throws) - 5x

Full Delivery, Short Distance (30'- 35') from Set Position:

- **Rhythm/Cadence** Focus - x10

Continue with Rhythm/Cadence focus,

...including each of the following specific focus points for set of throws:

<u>Delivery Phases 1 & 2 (Slow, Fast | '4'-'8') focus</u>:

- <u>**Drive**</u> & Pull: ***Legs*** focus - x5
- Drive & <u>**Pull**</u>: ***Anchor*** focus - x5

<u>Delivery Phases 2 & 3 (Fast-Faster | '8'-'10') focus</u>:

- <u>**Pull**</u> & Snap: ***Anchor*** focus - x5
- Pull & <u>**Snap**</u>: Arm working ***Down*** focus - x5
- Pull & <u>**Snap**</u>: ***Wrist*** Snap as focus (leads arm action down) - x5
- <u>**Pull &**</u> <u>Snap</u>: Acceleration (***Fast-Faster***) focus - x5

Warm-up Throws: 25
Rocking Action Pitches: 35
Full Delivery Pitches: 45
Total Throws: 105

Total Cumulative Sessions: 9-14

The **Drive** of the back leg occurs just prior to landing the stride foot.
The **Pull-Anchor** occurs as the stride foot lands

Daily Drills 10x/each on days you don't do Throwing Workouts ...now including 'Stride' and '90/45'

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Beyond Phase 5

At this point the pitcher and/or coach/adult have a good sense of the different aspects of the delivery and workout components.

Depending on the time of year, time available to practice, and the amount to overall throwing a player is doing day to day, a modified version of the workouts can be applied as they make sense.

In the heat of the season a player may only do 1-2 throwing workouts per week. It is preferable to do two short workouts rather than just one longer workout, each week. But that is not a hard and fast rule.

A good in-season workout is 20-25 Rocking Action throws and 10-15 full delivery throws (20 of each might be an option for a player who is a primary starter for their team and feel the need to for more full delivery throws from full distance). Consistency and quality is far more important than quantity. Get the workout done, then move on to something else

The Phase 5 workout involves a total of 105 throws; this includes the 25 'warm-up' throws. By this point in the program a player has built up the arm strength to handle this number of throws.

The distance of the 'Full Delivery' throws can be spread out between short distance (30'-35'), medium distance (40'-42'), and full distance. Older stronger pitchers can jump straight from short distance to full distance, or start working from medium distance, then bounce back to full distance.

An important point to take into account, when working with this age group, we are constantly working to improve throwing mechanics. Pitching Longer/Full Distance is not required, when mechanics is the primary focus. When most throws during a pitching practice are short distance, we are reducing the workload on the arm.

Note: If you are working with an older, more experienced and/or more talented pitcher, do not discount the value of breaking down their delivery and going through these drills and activities as part of a maintenance program. A younger pitcher and/or a novice pitcher does not need to be in a rush to throw full distance. Take what time is needed to first develop strength and consistency in throws before pushing them to full distance work.

The number of pitches thrown in the Standard Workout should be modified based on the following:

1. How their ***arm feels*** on workout day (most important consideration)
2. When they ***last pitched*** in a game (and how much) and when they might next pitch in a game
3. How much throwing they are doing ***in addition to pitching***:
    - ***Catchers can easily run up the number of throws*** they make without us noticing. They ***often are not the focus*** of an activity; working with a pitcher, or when involved in drills focused on other positions.
    - ***Position Player activities/drills***. We need to factor in the ***number of throws a player makes during their position work.*** Counting the number of pitches they throw in a game, and/or pitching practice, does not account for all their arm use.