

The 'Swing' is a 'Snap' (Straight Line Path of the Hands)

Two aspect of the swing are 'circular':

1. Leg Turn
2. Path of the Bat Barrel

Much of the Swing Involves 'Straight Line' Actions

1. The top-hand **elbow** snaps from its position when holding the bat in the stance, in a Straight Line, to a point along side the torso (Sideways Karate Chop)
2. The **bottom-hand** 'pulls' Straight towards Contact Point, for about 6". Then its contribution to the swing is done.
3. The **top-hand wrist** uses a 'Skip-a-Rock' action, Straight forward, 'snapping' the barrel of the bat through Contact Point.
4. The energy of the Skip-a-Rock action continues in a Straight line until the top-hand arm is fully **Extended, straight**.
- p.45

The 'Swing' is a Snap

Bottom hand (**Hinge**) 'stops' after moving 'Half Way', Straight. The top-hand wrist '**Snaps**' (accelerates) the barrel of the bat through Contact Point, past the **Hinge** of the bottom hand.

Is The Stride Needed in the Swing?

Most successful batters Do Not stride. We will not tell any batter to stride. If a batter chooses to stride we leave them alone unless we see the stride causing them problems.

Striding is an individual thing, mostly in relation to an individual's instinctive timing mechanism. It is OK to stride if it feels natural to a batter, HOWEVER...

I encourage young batters to work **without using a stride**. Striding is additional movement for a batter to learn to execute with body control and balance. More movements in the swing; more chances for mistakes. A solution for eliminating or reducing a problematic stride is to widen the stance.

The videos below; WATCH: None of the batters stride. A few pick up their front foot and set it back down; an action called a 'Step' or 'Toe Tap' (timing mechanisms like a stride, but with less movement). Many (older and stronger) players today use this type of an action in place of a stride. These actions require quite a bit of leg strength, which players gain in their teen years. Younger kids are fine by simply 'Turning Back'.

[Canada v Italy](#)

1 min 57 sec Aug 3, 2013

[Orioles v Blue Jays](#)

1 min 9 sec Sept 26, 2022

[M's v Blue Jays](#)

4 mins Sept 2022

(watch: 0:25 | 1:01 | 1:30 | 1:51 | 2:20 | 2:37 | 3:03)

Santana in the first clip, and the Jays batter in the last clip, Do lift their front foot. However, they set their foot back down, pretty much right where the foot started. Note that they do so slowly and with control of their bodies. These are grown men with tremendous body strength. Very few kids could execute this action.

Batting - TRAINING the SWING

'No Bat' Drills to develop Muscle Memory

- Twist
- Switch Heels (Anchor)
- Lower Half Turn
- Sideways Karate Chop (Funny Bone)
- Bottom Hand - Half Way
- Skip-a-Rock

Tee Work

One focus point from No Bat Drills (not Twist or Lower Half Turn)

Also:

Head in Place | Face the Ball

Check Balance (Feet in Place)

Additional ways to deliver the ball more accurately than the standard batting practice pitch:

Soft Toss*

Coach positioned at approximately a 45 degree angle to the batter, gently tosses a ball up to the batter. We want the ball to reach the apex of the toss at Contact Point. Generally speaking, this is even with the front foot; height: belly button to mid-thigh.

Front Toss*

A protective screen is needed (a garbage can may be used with younger players; coach needs to duck a bit after tossing). Coach is positioned approximately 15' in front of home plate. Underhand Toss technique; deliver the ball firm and level.

*This link ([Options for Delivering the Ball](#)) takes you to the Batting Practice page on the BP Website. You'll need to scroll approximately one third of the way down the page. **Landmarks:** you will pass the large picture near the top of the page, a diagram, a video, and another diagram. (My apologies, I do not yet have links set up on this page.)

Batting Practice = Timing Practice (We don't give instruction to kids during Live Batting*)

- Muscles cannot translate verbal instruction between pitches. Reps using a Tee (or soft toss) are needed
- Short Distance (25'-30' off a knee is ideal). Throwing full distance while standing produces few good pitches.
- Key to batting a productive Batting Practice is STRIKES

*Exceptions ('Live 5')

Timing

1. 'See Ball, Turn Back'
2. 'Let the ball get to your feet'

The Swing

3. Turn Fast (LEGS power the swing)
4. HEAD in Place (no reaching); Face the Ball
5. FEET in Place (Balance)

'No Bat' Drills - Baseball Positive

Twist

Feet wider than the hips. Arms held a bit out from the sides of the body (for balance). Feet and legs turn back and forth, while keeping upper body (shoulders) still. Fives seconds, then rest. Repeat 2x.

Switch Heels

Batting Stance with feet wider than hips. Hands on hips. Upper body remains relaxed, especially shoulders and neck. Turn Back (front heel up); Switch Heels (Turn Fast). Head remains in place (centered between feet). Action is powered 100% by leg muscles.

Lower Half Turn

Batting Stance with hands positioned where they would hold a bat. Turn back, then switch heels. This action done at half or three-quarters speed. Ideally there is no movement in the upper body.

Sideways Karate Chop

Batting Stance with top hand positioned where the bat would be held (hand is open). Bottom hand (which is not part of the drill) on front hip. Turn Back, Turn Fast. The top-hand elbow 'snaps' in a straight line to a point along side the torso. The hand, with palm facing up, stops at a point fairly even with the front foot (Contact Point).

Bottom Hand Pull

Batting Stance with bottom hand positioned where the bat would be held. Top hand (which is not part of the drill) on back hip. Elbow of bottom hand is slightly bent. Bottom hand 'pulls' approximately 6" towards Contact Point. Elbow remains bent. The action ends at a point prior to reaching the center of the chest (Sternum). Objective: train minimal movement of bottom hand.

Skip-a-Rock

This drill begins at Contact Point (the end of the Sideways Karate Chop) with top-hand palm facing up. Emphasis is the wrist. Snap the wrist/hand straight forward. Allow hand and arm to extend straight forward until top-hand arm is fully extended ('Straight out over the pitcher's head') and the back shoulder is pulled forward.

Hand Clap

The elbow of the bottom-hand arm is placed against the front of the torso, with the palm of the hand facing back. The forearm is angled a bit so the bottom hand is even with the center of the torso. The bottom hand represents Contact Point; it plays no other role in the drill action. The top hand positioned where the bat would be held (hand is open). Execute the swing actions: Turn Back, Turn Fast, Sideways Karate Chop action (instead of 'chopping' with the top hand, the top hand contacts the bottom hand with a 'clapping' action). The top hand accelerates through contact point (bottom hand) in a straight line out over the pitcher's head' (Skip-a-Rock action) until the top-hand arm is fully extend including the back shoulder pulled forward.



Switch Heels
Sideways Karate Chop
Bottom Hand Half-Way
Contact Point



Skip-a-Rock
Bottom Hand Half-Way

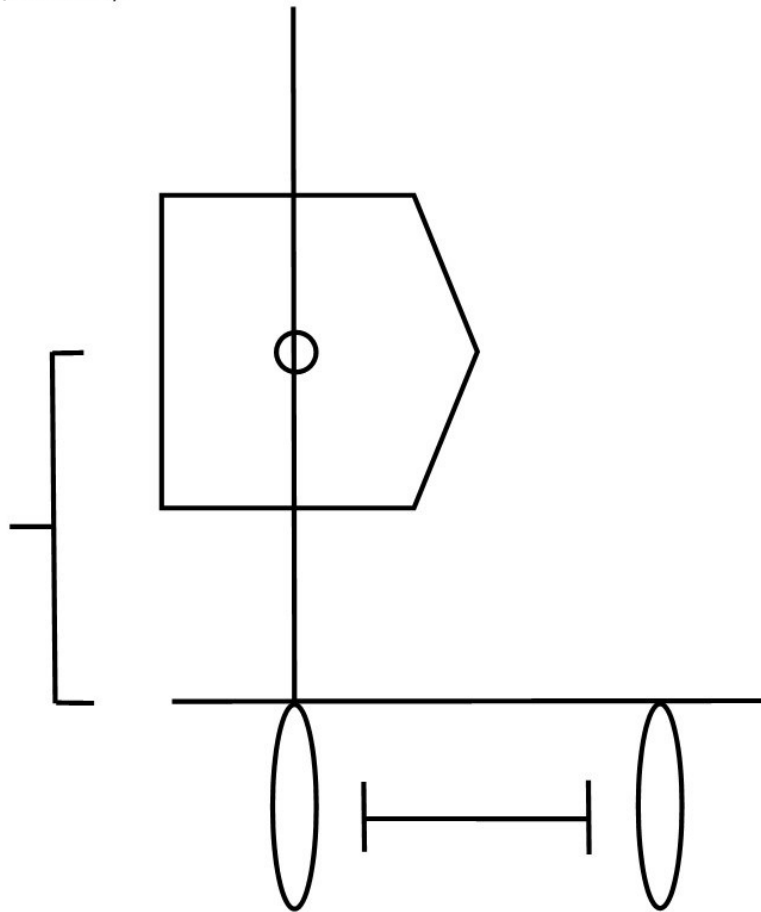


Straight-line Extension
Bottom Hand Remains Centered

Stance at a Tee

Have perpendicular line running across both batter's boxes and intersecting the Tee Stem and ball. The batter's front foot must be lined up with the ball. THIS POSITION IS CRITICAL and must be correct prior to EACH swing. The back foot, as noted below, is spread out so that the feet are slightly Wider Than The Batter's Shoulders. A good way to create a visual for the kids is telling them 'Your Feet Must Be Wider Than Your Knees'. It is easy for them to see the difference between their feet wider than their knees versus their feet directly under their knees (the spot where kids tend to want to position their feet. The problem is it is hard to generate power and be balanced when the feet are not wider than the knees/shoulders).

Batter stands one bat length from the ball. Measure from the ball to the batter's hip. NOTE: kids often measure distance with their arms extended - this is incorrect and we MUST prevent this mistake.



We want a straight line from the back toe to the front toe to the 'pitcher'

The figure drawn above represents the child's shoulders.

The ovals are their feet. The feet need to be wider than the shoulders.

TIMING

There are two fundamental aspects to timing the swing with a pitched ball:

1. See Ball, Turn Back - When the batter sees the ball in the pitcher's hand, they **Turn Back**
2. Let Ball Get to Feet - The batter allows the ball to travel to approximately their front foot, to make contact

See Ball, Turn Back

We have been teaching 'Turn Back' since the start of Day 1. On Day 4 we taught *when* to Turn Back. A batter turns back when they 'See the Ball'. ([Video](#) of a drill training this action; **watch 1:22-2:12**)

The Turn Back action prepares the legs to generate energy and power for the swing. This preparatory action has the same effect on the swing as when a person squats down prior to jumping up - [Batting is Like Jumping](#).

If a batter does not turn back, not only do they miss out on creating a substantial amount of energy and power for the swing, they are skipping the first step in the fundamental sequencing for executing a good swing – the use of their legs.

Let the Ball Get to Your Feet

A batter wants to contact the ball when their body is in its most powerful position, which is when the ball is even with their front foot, at the end of the Sideways Karate Chop action. ([p.42](#) - 'Contact Point')

Note: a pitch that is on the inside part of the plate is contacted a few inches before the ball reaches the front foot. A pitch on the outside part of the plate is contacted when the ball is a few inches past the front foot (closer to the catcher). Teaching and training these contact points is the primary focus of Batting, Part 2.

A major factor when young players swing and miss, or hit the ball weakly, is swinging too soon. This is also an issue for older players, including Major League players when they are struggling and are not confident in their swings.

The teaching phrase, 'Let the Ball Get to Your Feet' is one a coach uses constantly with young players.

[Page 43](#) shows four pictures of batters making contact pretty much even with their front foot. The pictures on [Page 56](#) illustrate batters not executing 'Let the Ball Get to Your Feet'.

Let the Ball Get to Your Feetexamples of **Not letting the ball get to the feet**



Batting Practice' is Timing Practice

Teaching a developing the swing is done in a controlled environment:

- 'No Bat' Drills
- Tee Work
- Soft Toss
- Short Front Toss

Live batting is not a time to teach batting technique. The activity we call batting practice is actually 'Timing Practice'.

During live batting work we limit our instruction to the five points below, which serve as reminders of base fundamentals that our batters are familiar with.

Points 1 and 2 are fundamental for timing. Points 3-5 are core mechanical points of which the players are familiar. They can digest and apply these reminders during their workout.

LIVE FIVE

Timing

- 1--- See Ball, Turn Back
- 2--- Let the ball get to your feet

Swing

- 3--- Turn Fast (Legs)
- 4--- Head in Place / Face the Ball
- 5--- Feet in Place - BALANCE (centered and tall)

It can be tempting to 'Coach' when players are batting live. Observing a batter missing multiple times or hitting the ball poorly can trigger the desire to give instruction directed at altering muscle movements. Remember, muscles take time and repetition to learn an action. Telling a batter to move differently 'on the next swing' is not realistic. We do not want to fill our players' heads full of information during Timing Practice.

When we see a consistent flaw swing after swing, one we want the batter to fix. We step away from live batting and spend a few minutes at the Tee. Address the incorrect action. Focus on that swing-aspect in the controlled Tee environment (no moving object, no timing required). Then jump back into live.

At the youth level practice, we likely don't have time to jump back and forth between live and the tee. Following the live session (maybe at the end of practice) we spend a minute with the player, pointing out the flaw that requires work. At worst, they can do extra reps of a No-Bat drill that can clean up the flaw. At best, the batter has a Tee at home and can take extra swing focusing on the flawed aspect of their swing.

Remember the one thing a Tee provides that no batting practice pitcher can, a perfect strike every time :)

Video of Pro Swings

Swing Sequence - Slo-Mo Videos (p58-59)

Below is a chart illustrating fundamental aspects of the swing in the sequence they occur. The second column has a reference to each aspect, as it was presented in class. The third column identifies the points of the swing that were presented at the beginning of Day 1:

“The swing is ‘A, B, C’; has three parts: Turn, Pull, Snap. Two additional things to be aware of, and in control of, during the swing: ‘Head in Place’ and ‘Feet in Place’.”

The final column identifies the three movements, in order of occurrence, that turn the body into a whip, to maximize power and bat speed.

This info is for reference, not something to study. Players don’t need to look at this for any reason other than to confirm what they learned in class is correct. Their muscles will learn all that is on this page by doing the No-Bat drills and taking focused, purposeful swings off a tee (like they learned to do in class).

On the next two pages are links to slow motion video of three Major League batters swinging the bat. For each swing, the points below are listed along with time marks. See these pro players executing the fundamental aspects of the swing taught in the class, It in the future, you may start seeing these points when watching batters swing.

My hope is a better understanding of the swing will help you guide your child’s development in the future. And possibly assist in teaching the swing to other kids on a team you choose to help coach :)

<u>Aspect of the Swing</u>	<u>Teaching Point_ in Class</u>	<u>Framework of the Swing</u>	<u>Body Whip Action; Movement Sequence</u>
See Ball, Turn Back	Timing		
Rhythm (Turn Back, Turn Fast is a continuous movement)	Tee Work - focus point		
Legs Initiate/Start the swing	Drill #3 - Lower Half Turn		
Switch Heels	Drill #2	(A) Turn	Legs
Turn Fast	Drill #1 - Twist		
Anchor	Body Control		
Sideways Karate Chop	Drill #4		Elbow
Bottom Hand Half-Way	Drill #6	(B) Pull	
Face the Ball Head in Place	Body Control	HEAD	
Let the Ball get to Your Feet	Timing		
Skip-a-Rock	Drill #5	(C) Snap	Wrist
Fast Faster Half-Way; All the Way			
...Acceleration	Tee Work - focus point		
Strait Line Extension	Drill #7 - Hand Clap		
Centered & Tall (and stacked <Anchor>)	Body Control		
Feet in Place Balance	Body Control	FEET	

Structure of the Videos

These are slow-motion videos. They show the same swing over and over. As the clips progress, they are shown at slower and slower speed. The final clip of the each is in super slow-motion.

Daniel Murphy

The final replays is terrific for showing the swing, but too slow for a sense of Turn Back and Rhythm. Time marks for these first two segments are from earlier parts of the video. (Cannot see pitch release in this video)

0:09-0:10	Turn Back (Turn -in of front side/shoulder is more gradual and less pronounced)
0:14-0:17	Rhythm (continuous movement)
0:54-0:56	Switch Heels
0:55	Legs Initiate/Start the swing
0:55-0:56	Turn Fast
0:56	Anchor
0:56	Sideways Karate Chop
0:56-0:57	Bottom Hand Half-Way
0:56-0:57	Face the Ball Head in Place
0:56	Let the Ball get to Your Feet
0:56-0:57	Skip-a-Rock Snap
0:56-0:58	Fast Faster Half-Way; All the Way Acceleration
0:58	Straight Line Extension
0:58-1:00	Centered & Tall (and stacked <Anchor>)
1:00	Feet in Place Balance

Bryce Harper

Harper uses a big leg kick and stride; there is a lot going on in preparation for his swing. That is his individual style. However, once he sets down his front foot (0:39), the actions of his actual swing are fundamentally sound, 'it is just like all the others'.

0:39-0:43	Switch Heels
0:42-0:43	Legs Initiate/Start the swing
0:42-0:46	Turn Fast
0:43-0:46	Sideways Karate Chop
0:46	Anchor
0:45-0:46	Bottom Hand Half-Way
0:44-0:48	Face the Ball
0:42-0:54	Head in Place
	Pause at 0:42 - Find the man in the stands , <u>just above Harpers right shoulder</u> (black beard and blue ball cap). Note the relationship between this man, and Harper's head. Watch his head for the next 12 seconds ; then look at the relationship between Harper's head, and the man with the blue ball cap. Consider how violent and powerful Harper's actions are in his swing; contrast that with how much head control he maintains.
0:46-0:47	Let the Ball get to Your Feet*
	---> This pitch is on the inside edge of the plate. Inside pitches are contacted a bit before the ball gets to <u>the</u> front foot. Contact Point for inside and outside pitches is beyond the scope of this class (Batting, Part 1: The Swing)
0:46-0:47	Skip-a-Rock Snap
0:45-0:48	Fast Faster Half-Way; All the Way Acceleration
0:48	<u>Straight</u> Line Extension
0:48-0:53	Centered & Tall (and Stacked)
0:53	Feet in Place Balance

Willson Contreras

0:38-0:42	Switch Heels
0:40	Legs Initiate/Start the swing
0:40-0:43	Turn Fast
0:41-0:44	Sideways Karate Chop
0:44	Anchor
0:43-0:45	Bottom Hand Half-Way
0:43-0:47	Face the Ball
0:42-0:49	Head in Place
0:45	Let the Ball get to Your Feet*

---> Another pitch on the inside edge of the plate, contacted a bit before the ball gets to the front foot. Many videos are of Home Runs. While Home runs are hit on pitches located on all parts of the plate, the highest percentage are pitches on the inner part of the plate.

0:44-0:46	Skip-a-Rock Snap
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Pitches on the outside part of the plate are contacted when the ball is a bit past the front foot



PITCHING

How the Pitching Delivery Information is Organized

- I. Sequence of actions for the entire delivery is outlined - [p.64-74](#)
 - II. The sequence of activities for teaching an individual - [p.75](#)
 - III. Incorporating pitching instruction, for the entire team, into a Team Practice - [p.76](#)
 - IV. Pitching Work During a Game - [p.77](#)
 - V. 'No Ball' Drills - [p.77-78](#)
 - VI. Pitching practice using the Rocking action - [p.79](#)
 - VII. Teaching and training the stride - [p.80](#)
 - VIII. Cadence of the Delivery - [p.81](#)
 - IX. Pitching Mechanics, Super Slo-Mo Video - Sonny Gray - [p.82-83](#)
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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)

Head (p.66)

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.67)

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

Stride (p.68)

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.69)

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.70)

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.71)

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.72)

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.73)

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.74)

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 torso 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.

* The path of the throwing-arm hand is *not exactly* straight down. The throwing hand ends up just outside of the glove-arm knee/leg.

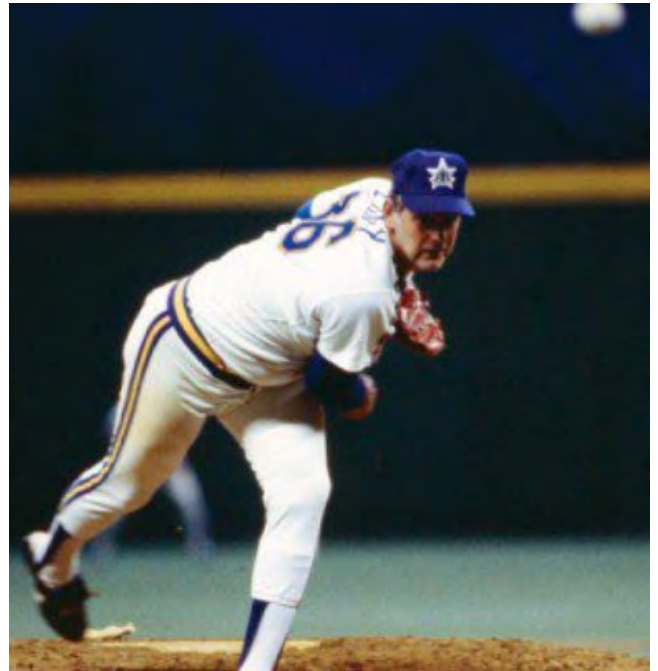
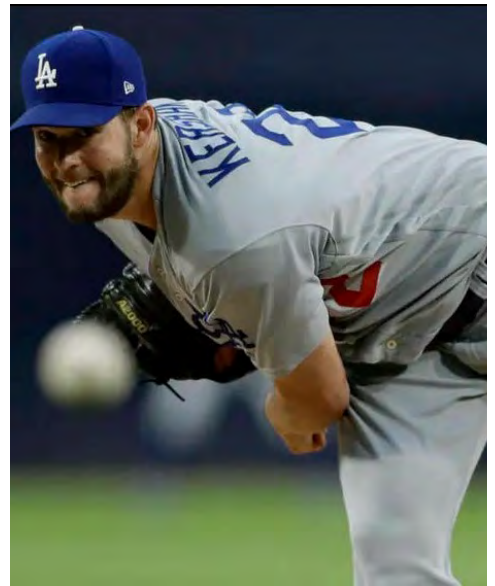
Momentum Straight (p.82-82 - Sonny Gray video)

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.

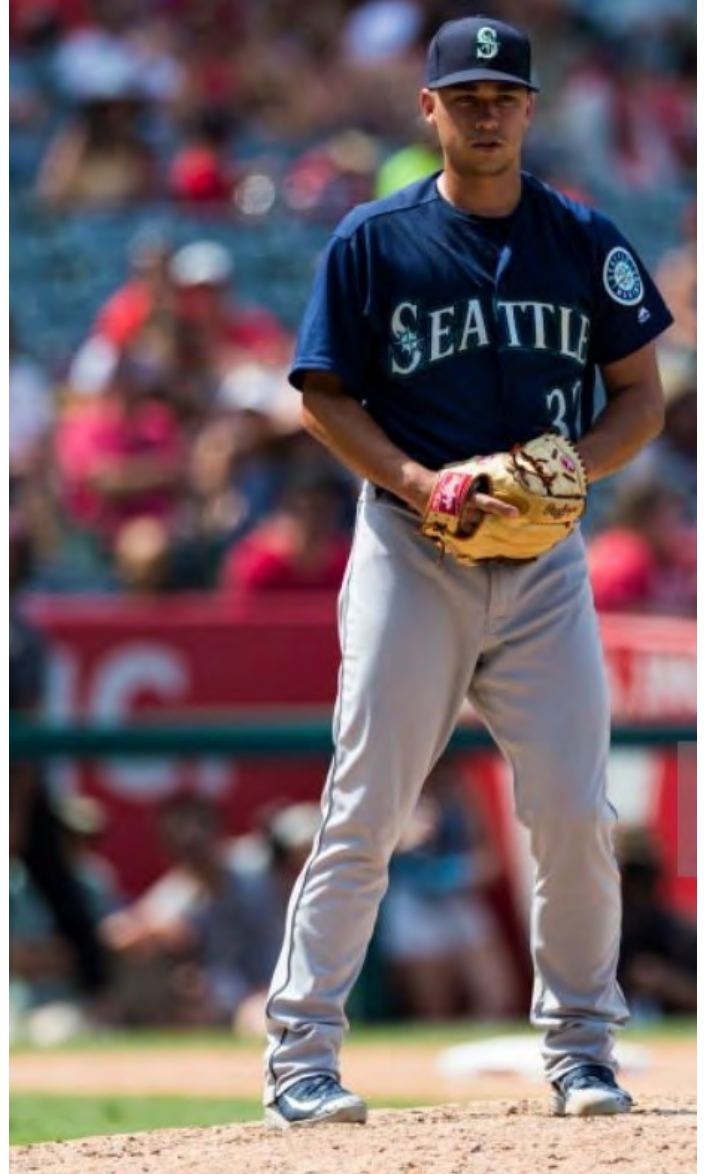
[We may observe older, more powerful pitchers 'fall off' to their glove side after completing their delivery. This is a result of the throwing hand finishing its down action outside of the glove-arm knee/leg. This action turns the torso to a 45 degree angle to home plate.

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

Head Straight and Still



'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**, leading to better control and rendering the windup into nothing more than **an elaborate way of pitching worse**"

Stride — 'Stride to Balance' (Centered)



Power Position



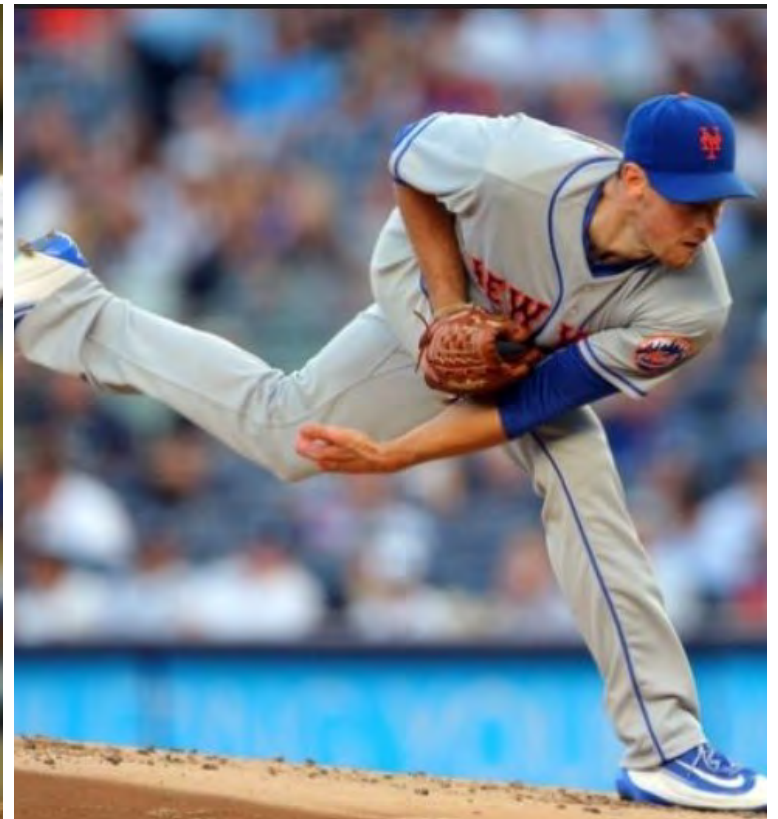
Lower Half Turn - Pitching



Turn & Pull | Drive & Pull



Anchor



Release Point



Teeter Totter | Snap Down



Sequence for Teaching an Individual

No Ball Drills

The first step of a training workout is doing No Ball drills. In most cases you don't do the full set (though it only takes 2-3 minutes). When working with one kid, they are not going to be receptive to doing the full set of drills. Pick 3 drills and do a set of 5-6 each; takes 30 seconds.

Rocking (from 30'-35')

This is always the core of a pitching workout. For this part, a pitcher makes 20-35 throws, depending on the time available. There are a few reasons why this aspect of training is so valuable.

- We work from short distance, so the concern of 'just getting the ball to the plate' is not a concern. From short distance the pitcher can focus on using correct actions.
- It is easy to isolate particular aspects of the throwing action when there is no wind-up or stride involved. This makes the training more effective and the player learns faster.
- Short distance throwing is less taxing on the arm, so a player can get more throws in during a pitching workout, and practice more often

Stride Focus

Player does 4-5 reps practicing a controlled stride without a ball. Then we have them throw 5-6 pitches focusing **just on their stride** action. We are still working from short distance.

Cadence (p.81)

The purpose of the previous the first three steps, covered above, is to get all the moving parts specific work before 'putting it all together'.

Cadence refers to executing the entire delivery. The delivery has three parts (Stride, Pull, Snap [p.81](#)), each working at a different 'speed'/level of effort.

The strength and experience of the pitcher, and what time of the year (pre-season, early season, late season) dictates how much time we put into this final aspect of a workout. There are three options for the Cadence aspect:

- Remain at short distance
- Medium distance (38'-42', depending on the individual)
- Full distance

It is suggested, even with the most experienced and talented pitcher, to not jump immediately back to full distance. Throw a half dozen pitches from Medium distance, with serious focus on executing Cadence well. Then move back to full distance.

A less experienced pitcher might throw a bit from short distance, then move back to medium to complete their workout. As they improved their skill and strength, we can later work them from full distance.

The amount a pitcher throws from each distance varies by pitcher and circumstance.

The Cadence aspect of most workouts is 20-25 pitches. (We are assuming a player practices their pitching at least 1x a week, possibly twice. We are practicing pitching throughout the season. ...this is addressed in the next section)