Pitching Mechanics
MasterMind System

Handbook

BASEBALL THINK TANK

Lantz Wheeler
Pitching Mechanics MasterMind System: Core Handbook

*Experience a proven system so advanced that MLB pitchers rely on it, yet so simple 8U pitchers master it!*

My #1 Goal is to teach a very simple way to teach you how to connect what you see, hear and feel to a specific movement pattern and become your own pitching coach!

The entire system revolves creating a Movement Awareness Program (MAP) for your CNS. By providing your CNS with clear and specific goals, coupling it with a training environment rich in immediate sensory feedback, you begin to connect the senses and form learned association for movement results, both good and bad.

As you begin to implement the system, you will become more aware, able to bridge the gap between perception and reality and make quicker adjustments and self corrections. In other words, you will become your own World’s Greatest Pitching Coach!

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Enjoy! If you have any questions, please reach out to me and let me help!

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Introduction

Pitching Mechanics MasterMind System

Thanks for purchasing The Pitching Mechanics MasterMind System. I promise you are going to find this different than anything you have seen before!

Looking back on my early college coaching days, I can only cringe. Like most coaches, I realized that every kid was different but I was the guy asking every one of them, to do the same. I never gave my players options, only instructions! I was blinded into believing that form was more important than function and that mechanics were all about reaching key positions. Boy! Was I ever wrong!

It took me over 9 years to develop this system to teach pitching mechanics. I have used it with players from 8U-MLB pitchers. The reason this system is so effective is three-fold:

1. It’s molded to the individual’s unique strengths and methods for learning and can be reshaped over and over again based on new movement goals.
2. It heightens awareness on 4 different levels, goal, visual, kinesthetic and auditory.
3. Pitchers learn to self correct by connecting 3 primary senses through immediate feedback and learned association of specific movement patterns inside the delivery.

Here’s why I felt the need to create the MasterMind System:

- My #1 goal has always been to rid the need of my responsibilities and promote pitchers to become their own pitching coach.
- I wanted to create a program that could be shaped and molded on each individual’s particular styles and unique strengths.
- Pitching mechanics originate at the central nervous system and I wanted to create an easy to follow program that would teach players to see, hear and feel their pitching mechanics to shorten the learning curve and bridge the gap between perception and reality.

To begin with, it’s important to understand that development occurs through a trial and error process. Knowing how NOT to do something is often just as valuable as how To do it.

Paul Nyman says it best:

“Player development is a complex series of trial and errors. The goal is not to eliminate failure but limit the amount of times each player fails”

The term development is misunderstood. I honestly believe it has become a sweeping generalization and generic term that is wrongly defined. The term development refers to developing and shaping motor programs, yes motor programs! The motor program being developed starts with the central nervous system.
You're actually developing the central nervous system to write a program, similar to computer software.

Your CNS controls everything that you do, it’s why you move the way you do, it’s why you learn the way you do, it’s everything that makes you, you! The CNS is comprised of your brain and spinal cord. Along with the peripheral nervous system (PNS), together they gather information from our outside environment using three primary senses. The CNS is constantly at work, making decisions on what to do next without you even knowing.

3 primary senses used to gather information:

1. What we see
2. What we feel
3. What we hear

You're going to find that each of us rely more heavily on one more than the other.

Did you know?

- 65% of us are visual learners but we are only able to retain 10% of what we see.
- We retain 40% of what we see and hear. Obviously, that can be good or bad, it depends on the information received and how you PERCEIVE it.
- We retain 90% of what we see, hear and do! (What “we do” is kinesthetic awareness, known as “feel” in this system)

One of the goals of this program is to teach you how to incorporate all three into your daily process to help you speed up your development. By connecting the 3 senses and creating an environment rich in sensory feedback you will speed up the process. Allow me to provide you with some examples of each are used inside the MasterMind System.

- See: Watching video of yourself and others performing the same activity.
- Feel: Associating a feel to location, mechanics, different pitches, etc...
- Hear: Establishing your own cues based on what you see and feel.

Here’s 4 Examples Of What You Won’t Encounter:

1. Most pitching instruction is sight dominant and opinion based on pleasing and ideal form from the instructor’s point of view.
2. Players face multiple setbacks because they are at the mercy of multiple views and conflicting opinions.
3. There’s a communication divide and our central nervous system becomes confused and frustrated.
4. Anytime the CNS is confused, it will be reflected by the body moving inefficiently.

The CNS is a very complex system!
Just like any computer program, the quality of the program is dependent upon the information it receives. As it receives the information, it goes to work writing your software program required for movement.

3 Stages of motor learning (elementary edition):

1. Stage 1 is all about gathering as much information as possible on WHAT to do. It’s this point the body is gathering as much information as possible from many different sources.
2. Stage 2 occurs after you learn WHAT you’re doing and your body attempts to figure out HOW to do it. This is the time in development that trial and error plays a major role. It’s important that the pitcher step outside his comfort zone and realize it’s OK to fail.
3. Stage 3 the pattern has been ingrained and you no longer have to think about it, some refer to this as muscle memory. At this stage, change can be difficult because the body doesn’t know right from wrong; it only does what it’s accustomed to doing.

THINK: Pitching mechanics is a series of multiple, simultaneous movement patterns. Each and every movement requires a specific motor program! It only takes one faulty movement to disrupt the entire system. It’s chaos, better known as the Butterfly Effect!

Whenever you attempt to make any sort of change, major or minor, you must begin at Stage 1. Even 19 year MLB vets MUST start over!

Before we get started, I would like to thank the guys that help contribute to my thought process and philosophies.

- **Mandy Wheeler:** My best friend and wife, no chance I would be where I am without her. Love ya Mandy!
- **Paul Nyman:** You will find Paul’s influence and philosophy scattered throughout the program and in my opinion, Paul is light years ahead of his time with his research.
- **Derek Johnson:** DJ really challenged my thought process and forced me to look at the process much differently than I had before.
- **Tom House:** Coach House was the first coach I encountered that questioned traditional pitching instruction and got my wheels turning to do the same.
- **Luther Bramblett:** Coach Bramblett gave me the opportunity to coach college baseball and I wouldn’t be where I am without his help.
- **Tony Robichaux:** Coach Robes was the first to introduce the concept of feel in the context of pitch development. He really challenged my thought process and put me on my current path for teaching.
Chapter 1

What Type Of Learner Are You?

Take this short test to establish your primary vehicles for learning.

Rate Yourself: 1 Never 2 On Occasion 3 Sometimes 4 Mostly 5 Always

Visual Learner

___ 1. I am more focused on a conversation when I can see the person I am talking to.
___ 2. In my free time, I am most likely to watch TV or read.
___ 3. If I had to explain a new project, I would prefer to draw it.
___ 4. I prefer pages with pictures.
___ 5. I’m a note taker
___ 6. I always write down directions.
___ 7. When looking for a misplaced item, I can usually look in my mind and see where I put it.
___ 8. I keep eye contact to better comprehend what others are saying.
___ 9. I’m a people watcher.
___ 10. I prefer to text.

Visual Total: ____ (Minimum score= 10 and Maximum score= 50)

Rate Yourself: 1 Never 2 On Occasion 3 Sometimes 4 Mostly 5 Always

Auditory Learner

___ 1. I’d rather have a good conversation than watch a good movie.
___ 2. I can understand someone talking to me, even if I am distracted by another task.
___ 3. I’m not a note taker. Taking notes often distracts me from the speaker.
___ 4. I talk to myself when writing or problem solving.
___ 5. I prefer video’s to reading.
___ 6. When I first meet someone, I use their name while talking with them to help me remember it.
___ 7. I can explain things in detail without having to draw them out.
___ 8. I listen to music every chance I get.
9. While reading, I read out loud/move my lips to hear the words in my head.
10. I think email and texting is impersonal and prefer to call people personally.

Auditory Total: _____ (Minimum score= 10 and Maximum score= 50)

Rate Yourself: 1 Never 2 On Occasion 3 Sometimes 4 Mostly 5 Always

Kinesthetic Learner
1. I don’t usually read the directions when attempting a project.
2. I move my lips when I read.
3. I usually only take notes when I’m required to.
4. To others I appear disorganized, but there is a method to my madness.
5. I use my hands when I talk.
6. I consider myself in shape and exercise regularly.
7. I’m a good dancer.
8. If I’m not moving, I’m bored!
9. I would rather demonstrate a technique then try and explain it.
10. I usually pace back and forth when I am talking on the phone.

Kinesthetic Total: _____ (Minimum score= 10 and Maximum score= 50)

Total each section and place the sum in the blocks below:

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<thead>
<tr>
<th>Visual Learner</th>
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Chapter 2
7 Facts About Your CNS & What You Need To Know To Create Your MAP (Movement Awareness Program)

**Number #1:** Your CNS writes your pitching mechanics “software program” is based upon:

- What you see
- What you hear
- What you feel

**There is no way that we could be expected to learn and move the same way.** You will interpret what you see, feel & hear much differently than I will, call it perception or opinion but it’s only one of over 1,000,000 variables that make each of us unique human beings.

1. The quality of your program is based on the information obtained early in the development process. This is extremely important for the younger pitchers reading this.
2. The CNS thrives in training environments rich in immediate sensory feedback.
3. Environments rich in sensory feedback heighten your awareness levels and bridge the gap between perception and reality.
4. Over time, your CNS creates a learned association based on the feedback received, we call these movement patterns.

**Number #2:** Your method for learning is programmed by your CNS & impacts the efficiency of your pitching mechanics!

65% of us are visual learners, however:

- We only retain 10% of what we see
- 40% of what we see & hear
- 90% of what we see, hear and do

1. Visual learners rely on what they see and benefit greatly from watching video or seeing others perform the same activity.
2. Audio learners: Rely on what they hear and listening to others.
3. Kinesthetic learners: Learn by doing or feeling.

Most of us rely on one more than the other, but **WE ARE ALL CAPABLE** of learning to coordinate all three into our training.

**Number #3:** Your body organizes itself around your movement goal (intent).
Your intent is the Primary Shaper of your pitching mechanics!

Why? Your body will organize itself and move according to your movement goal, as long as the goal is clearly defined (Bernstein Principle).

1. Your goal must be narrowed down to the smallest detail, avoid generalities whenever possible.
2. It's impossible to establish quality feedback if the goal is not perfectly clear.
3. We are trying to connect what we see, hear and feel to a specific movement pattern and that's not possible if the goal is not perfectly clear.

**Number #4: Muscle memory is not actually the correct term to describe what’s happening.**

The body has no idea of what’s right or wrong & it only does what it’s accustomed to doing!

1. The movements inside are actually specific motor programs created over a period of time and thousands of repetitions.
2. The more you repeat a movement, the more ingrained the movements become.
3. Movement patterns are similar to you speech patterns and are extremely difficult to change!

**Number #5:** Once you receive information through various senses, the brain sends out a signal to the body giving it specific directions on WHAT to do. The body then goes to work attempting to figure out HOW to do it.

Here's the point where multiple opinions and conflicting views "fry" our central nervous system. It's why your son is struggling. Allow me to provide you with a simple example.

Think of “what” as your movement goal, it’s your intent. The “how” is the motor program. If you're body is constantly receiving conflicting information or being asked to change the “what” & “how”, the program will work not work very efficiently.

**Number #6: The body craves simple and straightforward information!**

Anytime your body receives conflicting views or murky instructions, it will appear as inefficient movements. This is why you can’t rely on someone else’s cues to learn. If there is any confusion with the cues or video review, your body will not respond the way you want it to.

"Scientific Fact": Even if we were the "World’s Most Identical Twins" and shared the same central nervous system, our perception alone inside these 3 senses, would set in motion a totally unique set of pitching mechanics. Don't believe me? Here's proof

- I see what I see
- I hear what I hear
- I feel what I feel
That's why there is NO POSSIBLE WAY that we can be coached the same or expected to interpret information in the exact same way as someone else.

**Number #7: The body has no idea where to go, it has to be told!**

The body only does what it’s accustomed to doing. This is why traditional drill and instruction through subjective feedback is often a major contributor to your frustration and setbacks. It’s also the reason why you see improvement inside non-competitive environments but revert back to old patterns once you step into a competitive environment.

1. This is why we will always start at the end of the delivery and work backwards inside our clay drills.
2. The body will experience heightened awareness levels and move more efficiently when all 3 senses are connected to a movement pattern.
3. The body must learn the difference between right and wrong because it has no idea!
4. The body's natural GPS is FEEL.
5. Your body relies on feel to tell it where to go and where not to go.
6. Pain is a perfect example, ever noticed how pain can influence how you move. When you stump your toe, do you limp? Your brain is trying to protect your body and therefore it sends out directions to move accordingly.
Chapter 3:
4 Levels Of Awareness That Must Be Questioned!

1. “What’s Your Intent?” (Goal Awareness)
   a. Always have a crystal clear intent (goal) for the drill.
   b. Keep the goal/intent singular; don’t give the body multiple movement goals to begin with.
   c. Your intent shapes the drill.

2. “What Did You SEE?” (Visual Awareness)
   a. It’s important to video whenever time permits.
   b. I recommend Ubersense if you have an iPhone or iPad, it’s free and provides the necessary tools.
   c. 65% of the population is visual learners but video alone isn’t enough information for the body to write or re-write motor programs. It desperately needs other outlets.

3. “What Did You FEEL?” (Kinesthetic Awareness)
   a. Feel is the body’s native language
   b. The body responds immediately to feel, good or bad.
   c. Feel serves as your internal GPS.
   d. It can be viewed as breadcrumbs to help the body find a way back and forth.
   e. Provides concrete, tangible evidence to the body on where to go and where not to go.
   f. Feel defines the movement goal more clearly and provides the body with a road map.

4. “In Your Own Words, HOW Would You Describe It?” CUES (Audio Awareness)
   a. It’s important that the player create his own cues to make sense of what he sees and feels.
   b. Individual cues eliminate confusion
   c. Cues serve as a positive reinforcement to the body prior to the activity.
   d. It’s important that coaches and players learn to speak a universal language.

**Question #1:** “What’s Your Intent or Goal With This Throw?” (Intent=Goal Awareness)

The definition: Intent: noun: intention or purpose adjective: Resolved or determined to do something

Intent is a concept that we use daily with our training. It’s the WHAT (goal)!

**Intent is the primary influence on your movement patterns!**
3 Reasons Why Intent Is Critical To Your Pitching Mechanics:

1. The brain “craves” simplicity and straightforward information. It has enough going on and will respond inefficiently when the directions are not clear.
2. The body will organize itself and move according to the goal as long as the goal is clearly defined. (Bernstein Principle) Throw it harder, throw it faster gives the CNS a clear goal.
3. Intent is the clearest form of communication

Paul Nyman has been saying this for years; he termed it “intent to throw hard”. His philosophy centers around players that try to throw hard early in life create movement patterns that allow them to throw harder than players that didn’t “throw with intent.” Paul’s concept of intent changed many people’s views, especially mine, after introducing the world to the concept.

The reason Intent is so powerful is because it gives the CNS clear and straightforward directions. It’s a very simple, external cue. Remember earlier, the CNS writes the program for your movement based on the information it receives. It has to know WHAT to do! Therefore it’s critical that the information given is crystal clear.

Allow me to provide you with an example of how Intent can influence the software program written for pitching mechanics. The following examples are based off young kids starting early in their development with intent on throwing strikes vs. intent to throw hard (Paul Nyman).

You Become Your Intent: 2 Powerful Examples:

In my upcoming velocity program, we will go into greater detail. However, I just want to highlight the role of Intent in the early development process. Your Intent is the primary tool used by the CNS to write your “mechanical software” program. It all starts with your intent!

Is your son’s intent to throw strikes: Pitchers intent on locating and throwing strikes have a more passive, “controlled” pitching delivery to accomplish the goal. Young pitchers have limited motor skills and let’s face it, pitching requires connecting and disconnecting multiple movement patterns, simultaneously! That’s a tough task for anyone, especially a young kid. Therefore, their intent to throw strikes and succeed immediately influences them to slow down and eliminate excessive movement because it detracts from their intent on throwing strikes and ability win games.

Because of the intent to throw strikes, they never acquire the necessary motor programs required for high velocity pitchers. They aren’t introduced to the importance of tempo, rhythm and momentum.

Why? "Because pitching is all about throwing strikes!” at least they’re told.

At this point in early development they acquire the skill for throwing strikes but miss out on the ability aspect needed to throw the ball at higher velocities later in development.

Is Your Son’s Intent To Throw Hard: Young pitchers with intent to throw the ball hard will find a way to throw the ball harder. They begin to associate aggressive/violent movement patterns inside
their delivery with higher velocities. By doing so, they learn to involve more of the body to generate force and power by implementing higher leg kicks, turning of the hips, aggressive rotation and other critical components indicative of high velocity pitchers.

THINK: Do you see a difference between Aroldis Chapman’s pitching mechanics compared to say, Jamie Moyer or Greg Maddux?

Early in development, pitchers with the intent to throw hard, learn the importance of rhythm/tempo and the benefit of added momentum. Because they aren’t constrained by the strike zone, they develop the necessary motor patterns required to throw the ball harder.

These movement patterns benefit velocity later in their career. Most coaches believe that command is easier to teach later in development than velocity. I’ve had success on both sides but personally, my son will not encounter the constraints of the strike zone until he’s around 11 or 12 years old.

Here’s what Goose Gossage had to say at his Hall of Fame induction speech:

“I remember pitching to my brother Jack in his front yard winding up and trying to throw the ball as hard as I possibly could throw. He’d say, ”You’re not throwing very hard. You’re throwing like a sissy.” I’d have tears in my eyes I’d be trying so hard, but looking back, that’s where my wild delivery came from, all arms and legs, flailing, coming right at you.”

Intent is the most powerful concept in the pitching mechanics universe!!

**Question #2:** “What Did You FEEL?” (FEEL=Kinesthetic Awareness)

**Pitching is all about FEEL!**

Feel is one of 4 pillars inside The Pitching Mechanics Mastermind Drill System. It’s also an integral part inside our pitch development routine. In other words, we attempt to place a feel to everything that we do, it’s that important!

Most of us are visual learners, therefore, video has to be part of your daily routine inside the development process. In fact, 65% of us learn by what we see or watching others perform the activity. However, as I have documented in the past, most our instruction today is dominated in sight based training.

**Again, it’s important to note:**

- We retain approximately 10 percent of what we see;
- 30 to 40 percent of what we see and hear;
- and 90 percent of what we see, hear, and do.
- We all have the capability to learn via all three styles, but are usually dominate in one and most players NEVER learn to FEEL.
What if you implemented feel with the use of video analysis? Would that increase your chances for developing better pitching mechanics? I think so, in fact, I know it does!

**The body speaks in "feel", it's the body's native language!**

I heard a great quote by Gray Cook, “The language of movement is written in feel.”

*The proprioceptive system uses stretch and pressure receptors located in the muscles, joints, and skin to alert our brain about how we are interacting with the outside environment.*

Let’s think about that for a minute, do you get what he’s saying? If not, no worries allow me to provide you with an example that all pitching coaches can relate to.

Have you ever seen one of your pitchers pitching with a sore shoulder or elbow? Maybe even a sore knee or strained groin? Obviously, soreness sends pain signals to the brain, so how does the brain respond?

1. After receiving the alarm signal, it communicates back to the body and tells it "Protect yourself!"
2. It protects itself at the source of the pain by asking another region of the body to take on double duty.
3. That’s why you will see guys with lower body issues becoming more upper body aggressive.
4. It protects the lower body but in the process it places more stress on the arm, not good!

See where I’m going with this? The body understands and communicates through feel.

**Whether it’s a negative feel or positive feel, the body responds.**

Feel can be viewed as your internal GPS System.

"**Feel**" **gives the body clear directions through sensory feedback on where to go and not go!**

Once the body becomes aware, (kinesthetic awareness) it gives it a clearer understanding and increases your chances to repeat certain movements in the delivery. Why?

**5 Important Notes About The Body**

1. The body craves clear communication.
2. The clearer the information it receives the more efficient the movement becomes.
3. Feel provides clear communication and speaks in a language understood by the body.
4. The body doesn’t know where to go, it has to be told.
5. Feel tells the body where to go once it’s been introduced.
Personally, I have found that players of all ages and skill levels increase their chances for improving their delivery once they have been introduced to the concept of “feel”. Instead of telling a kid to move a certain way, place a feel to the movement and it will ensure you’re on the same page.

**Feel defines the movement goal more clearly!**

**Question #3:** “What Do You SEE?” (Visual Awareness) Video & Emulation

We use video on a daily basis; I make it a requirement for all of my pitchers. Video is a necessary tool. We use it to analyze our movements, as well as watching multiple pitchers performing the same activity. However, with most of today’s instruction, pitchers are led to believe that VIDEO is the end all, cure all. It couldn’t be further from the truth.

Remember: We only retain 10% of what we SEE!

During the off-season, we use video whenever time permits. Obviously, at the college level and high school level, time constraints prevent this from happening. Trust me I know!

**4 Reasons We Use Video:**

1. It’s used to give a visual of the activity, duh.
2. It serves as a form of immediate feedback.
3. We are trying to connect a feel and cue to what we see. “How do I describe it?”
4. Attempting to bridge the gap between perception and reality. However, as Paul Nyman would say, “We see what we want to see.”
5. 65% of pitchers are visual learners.

**It’s a great tool, but it’s only one tool!**

Now, I’m going to take this into a different direction. Video has some side effects and if you’re relying only on video for feedback, you’re headed down a dangerous path. You hear coaches say all the time, “If you’re not videotaping, you’re not getting better.” 10% true and 90% wrong! More times than not, you run into this situation with video:

- The video is used as a reinforcement to justify the instructor’s opinion of what you should look like.
- The instructor’s ideal of “good mechanics” becomes the goal for the pitcher.
- Pitcher’s don’t trust what they feel, their intent becomes moving for “reward” and they often value form over function!

**Emulation after a certain age is nothing more than a form of imitation!**

Emulation is critical early in development but can become a detriment to development later in the process. Pitchers that attempt to emulate will find themselves placing more value on form vs. function. Their intent becomes going from Point A – B - C with the false belief they will stay healthy and throw harder simply because their delivery models that of the MLB pitcher being emulated. I call it the A, B, C’s of pitching mechanics!
The fatal flaw which occurs inside this particular learning method is simple. Efficient movement is not predicated on Points A, B, & C. Efficient movement occurs between letters.

**The magic is in the movement!**

In other words, the MLB pitchers form or posture you are imitating is a mere product of how his body functions! It’s impossible for you to duplicate the process because your software program for movement is not the same.

Whenever, watching other pitchers, try and find multiple examples. Don’t fall into the “Form Trap”!

**The Side-Effects of Video Analysis and Ideal Mechanical Models:**

**Paralysis by analysis:** The athlete is constrained due to over analyzing every movement, making even unconscious movements, conscious. They often associate every issue and reference every adjustment, as a mechanical issue. They are drifters in Stage 2 of motor learning, conscious of every movement, nothing looks easy or natural and it's constantly changing.

**Imitation via emulation:** Emulation is very productive for younger kids learning to throw, however after a certain age or skill level it creates thought conscious movement patterns. It takes away from individual strengths because they are imitating another pitcher.

After a certain age, your movement patterns have become ingrained and emulation is nothing more than imitation. Why? The model’s strengths are not your strengths, regardless of how much time you spend copying positioning and patterns.

**In other words, his CNS is not your CNS, there lies the deciding factor!**

Why be happy impersonating Elvis, why not become the next Elvis?

**Mechanical Disassociation:** Video has a strange way of sending mixed signals to the athlete. Often players will lose sight of perspective and fall into the trap of mechanics. They believe every issue can be resolved with a mechanical tweak. Therefore, they find themselves unable to surpass the 2nd stage of motor learning.

Video analysis is the "eating disorder" of player development. Pitchers that constantly rely on video as their only means of feedback don't gain a clear perspective in movement and it can become a nasty cycle. You've all seen these guys, they're the ones constantly going through dry delivery drills and after each pitch, they are analyzing their delivery.

**They begin to think only in terms of mechanics, other adjustments are not considered.**

- They begin to place a mechanical fix with every issue and that takes away from what's real.
- They never learn to connect using other senses such as feeling and hearing.
- Relying only on sight is not an efficient way to teach the CNS or tell the body what to do.
I believe the exclusive use of video for all aspects of training could become a constraint in its own right.

The body has built in mechanisms for learning and sight is only one of them.

Now don’t get me wrong, video is a great tool and it’s something I use daily.

However, it’s only a good tool when used conjointly with other tools for learning.

**Question #4:** In Your Own Words, Describe HOW You Accomplished The Movement Goal! (CUES =Auditory Awareness)

I will be the first to admit that I’m as guilty as anyone when it comes to communicating poorly with my pitchers.

**THINK:** Have you ever considered what’s going on when you’re asked or given instructions on how to perform an activity or drill?

Although, it seems extremely simple to you or I, it may be a very daunting task for the individual. When a player struggles with a certain movement pattern, drill or pitch, we are quick to place the blame or write them off as being un-coachable or lacking ability. However, that’s not always the case. It could be a communication issue.

- Cues can be the biggest obstacle in development and communication.
- Cues aren’t real, they are someone’s interpretation of what is happening or how it’s to be performed.
- The same instruction or cue could be defined 15 different ways by 20 kids in the room.

“He just doesn’t get it, I tell him all the time to use his legs but still he doesn’t do it!”

Sound familiar? In situations like this, the player may be trying to use his legs, but his idea of how to use them may be totally different than what the instructor views as pleasing or ideal. Keep this in mind the next time you find yourself aggravated with your son or pitchers.

It’s critical that you are able to create your own language of HOW YOU accomplish the movement goal.

**Cues can be used as positive reinforcement to the body/brain on how to accomplish the goal.**

Traditional cues in baseball include, “Stay back”, “Stay tall”, etc... However, they can be interpreted 100’s of different ways. Baseball instruction is FILLED with cues. They are like fairy tales, passed from generation to generation with each story teller adding their personal views and opinions. Most cues originate based on our descriptions of how “WE” perceive ourselves or others performing the activity, it’s what makes sense to us.

I bet you’ve been told or instructed one of your pitchers to:

- Stay Back
• Get on top of the ball
• Lead with your hips
• Stay over the rubber

What does each mean to you?

During my last pitching camp, I asked the players to describe their association with each of the cues listed above. It was no surprise that only a few shared the same definitions as others in the room. Of the 30 participants, we had 7 different definitions! When I asked what does, “Stay back”, mean to you, I received answers referring to weight shift, positioning of the head and one player thought I was referring to bunt coverage!

Your terminology can’t be vague. You will make your point more clearly by:

• Showing them your way of “doing it”
• Having them perform it
• Feel it
• Using multiple examples of others performing it

**Do whatever you can to make sure it’s PERFECTLY CLEAR!**

*Important notes about cues:*

• It’s absolutely necessary that a player can describe in “his own words” what he sees and feels.
• This gives the body clear directions on what to do and how to do it.
• It also serves as a positive reinforcement that will increase performance. Pitching mechanics will shape more efficiently when the player can give his body specific directions on how to accomplish the goal (internal cue).
• Does it really matter how you describe an activity if it doesn’t make sense to the player?
• Allowing the player to establish cues promotes trust

*Ask the player:* How would you describe it or explain it to yourself if you were the coach?

**THINK:** Whenever you give instructions on how to perform a drill, the player must process the information and then the body moves according to what it “perceives” it is supposed to do. Therefore, it’s imperative that you give clear and concise directions for the goal of the activity.

There are two primary forms of cues, external and internal.

1. **External Cues:** Cues that might include “throw it harder”, “throw it faster.” External cues are directed at the movement goal, “what to do”. (The CNS loves these!)
2. **Internal Cues:** Cues that might include, “Stay back”, “Drive the hips forward”. Internal cues used as instruction on how to accomplish the movement goal, “how to do it.” (The CNS is not fond of these unless developed by the individual)

**THINK:** The problem with cues occurs when internal cues (how your body should move) originate from external sources. (I would compare them to a back seat driver, how annoying are those guys?)
External cues are great when the goal is made simple and perfectly clear. They give clear and specific directions for the brain.

- The brain “craves” simplicity and straightforward information. It has enough going on and will respond inefficiently when the directions are not clear.
- The body will organize itself and move according to the goal as long as the goal is clearly defined. Throw it harder, throw it faster gives the CNS a clear goal.

Internal cues are very productive when established and used by the individual:

1. They can “make sense” of what you see or feel and therefore connect the body with the mind.
2. Internal cues also provide positive reinforcement to the brain.

As Paul Nyman tells us, “The goal for player development is limiting the amount of times a player fails!” Therefore, it’s important that we do our best to rid the CNS of confusion whenever possible.

We can limit confusion by allowing players to create their own cues based on their learned association through the trial and error process!

In closing, communication is a two way street, internal and external. It’s important that players understand the power of intent and that it becomes ritualistic to have intent with every throw or activity. It’s also important that coaches understand and are aware of the player’s intent. Players must establish internal cues while coaches need to focus more on external cues. It’s going to be tough, but I suggest that as a coach, you try and eliminate the use of internal cues, allow them to create their own!

After all, it doesn’t matter if it makes sense to you or I, only to the player performing the activity.
Chapter 4: 
The Power Of Immediate Feedback & Deliberate Practice

The Power Of Immediate Feedback:

Feedback comes in many forms and is always available if you know where to look.

The faster the body receives feedback the more beneficial the feedback becomes. This is referred to as immediate feedback. The CNS relies on three senses to gather feedback and make informed decisions. The more in tune a player becomes with sensory feedback, the faster the development takes shape.

Examples of feedback we use inside The Pitching Mechanics MasterMind System:

1. Immediate feedback:
   a. Video
   b. Feel
   c. Personal cues

2. Sensory Feedback
   a. What we see
   b. What we feel
   c. What we hear

This system revolves around creating an environment rich in sensory feedback. The goal is to connect the senses and provide our CNS with information needed to limit failure and move more efficiently!

Since I grew up in Kentucky, let’s use another example, basketball. Is there a better source of immediate feedback than shooting a basketball? How many of you guys have shot a basketball enough to know whether the shot was good or bad based on how it was released from your hand? How do you know? Immediate feedback!

Basketball players are given immediate feedback with every shot. Unlike baseball, there is no “gray area.” The shot’s either in or out, you win or lose with every attempt. It’s as simple as that!

Here’s WHY it works:

- Basketball players begin to associate how they feel the ball leaving their hands with what they see in the end result, the shot’s in or out.
- Because of the immediate feedback, they begin to associate a feel with even the slightest miscue.
• The 3rd part of the equation is sound. There’s a difference between the shot that touches nothing but net and the one that clanks off the background.

Basketball provides a rich environment with immediate sensory feedback. To summarize; basketball players rely on 3 senses to gather information and make adjustments with each shot based on the previous result:

1. Did you see it go in or out? Was it wide, short, soft, hard?
2. You feel the ball leaving a specific part of the hand or fingers and begin to associate what you feel to the result.
3. Sound also plays a major factor in the feedback. There’s a different feel associated for an air ball vs. a brick, right?
4. Basketball creates an environment rich in immediate sensory feedback and connects the senses, there’s a feel associated to what you see and hear!

Awareness = Adjustments = Development

It’s sad to say but most pitchers waste their time inside their throwing program and wonder why they have such poor or mediocre results. They never have a plan or process. They don’t have an intent or focus. They can’t gather feedback because they aren’t looking for it

Why couldn’t your approach inside your throwing program reflect that of a free throw shooter?

You see, basketball is a prime example of an environment that includes all three types of sensory feedback. Your CNS thrives in environments like this because it is so rich in feedback. In fact, each of the three senses are collaborating together in hopes of reaching the ultimate goal, making the shot! Each sense has a unique responsibility and over time, they begin to connect. It makes it easy to write your internal software program needed based on the amount of quality feedback received from three different senses.

Pitchers must learn immediately whether they succeeded or failed with each and every activity.

If that line is blurred, development stalls and adjustments never happen. It’s pretty simple really, there are no ties in player development, you either win or you lose with each and every activity or drill!

The entire trial and error process revolves around immediate feedback in order to make the next adjustment. It’s just as important that you learn “How Not To” do something. If you failed 49 times but succeeded on the 50th attempt, well, you learned 49 ways how not to do it, that’s important info.

Pitchers that do not receive feedback or learn how to gather feedback, always live in a world blurred with perception. They can’t tell the difference between right and wrong.

Deliberate Approach:

As a player is learning HOW to do something, a deliberate approach and immediate feedback MUST be part of everything they do!
The process should be applied with every throw:

- What are you doing?
- How are you going to do it?
- What did you learn from the results?

A deliberate approach increases:

1. The rate of development
2. The ability to recognize & make adjustments on the fly.
3. And, provides a much clearer perspective on any and all situations.

Pitchers that do not apply a deliberate approach or don’t know how to gather feedback inside their routine are usually the ones that without a clear perspective. They often spend time looking for answers in the wrong direction. 9/10 times they will look for the answer or blame every problem on mechanics, it’s a nasty cycle that constantly repeats itself!

**In other words, they are shooting a basketball with no goal!**

![Image](image_url)

There’s no plan or focus, they are simply going through the motions. They begin to form bad habits and the more they repeat these bad habits, the development begins to regress and take shape in a negative fashion.

**Development is constantly evolving and applies to first time throwers to seasoned vets!**

Your goal during the off-season is too constantly challenge yourself to seek better ways to do what you do. The same applies during the in-season to a degree. I refrain from seeking changes during the season because of the many constraints the athlete faces.
“Imagine” attempting to change your accent at a public speaking event! You would be so pressed to change the accent that the quality of the speech would take a big hit.

A couple of thoughts to consider during the off-season:

- Don’t be afraid to step outside of your comfort zone and try new things.
- Over-exaggerate movements.
- Realize that there has to be a time and place where it’s Ok to fail!
- Learn something today that can be applied tomorrow.

**Your plan for today is always based on yesterday’s results!**

The Power Of A Journal:

There is a strong correlation between keeping a daily journal and success. Some guys scratch their head when I tell them this for the first time, they don’t get it. Being deliberate applies to you entire approach, not just your practice. If you’re not writing it down, charting or measuring, how do you know what to focus on?

If you’re a high school, college or professional pitcher, I’m sure that your strength and conditioning coach monitors and tracks your progress in the weight room, right? While you’re sitting in class or teaching the class, you take notes to prepare yourself for the upcoming exams, right? Well, if that’s the case……

**Why don’t more baseball players do this?**

Throughout the year, I’m fortunate to work with 100’s of pitchers. They range 11 year olds to MLB pitchers. Regardless of their age or skill level, there’s not a lot that changes. Strange, huh? Not really. I firmly believe that the development process will speed up when:

- The player understands they have to take ownership in the process.
- They become aware of their strengths and their weaknesses.
- They begin to bridge the gap between perception and reality.

How do they do this?

**Step 1:** Make a financial investment of less than $2 by purchasing a .99 cent composition book and a .99 cent pen or pencil.

**Step 2:** Take at least 2 minutes a day jotting down miscellaneous notes. This could include any and all activities such as:

- Chart bull pens or skill work.
- Writing down cues they establish that makes sense to THEM! ([Read this article!](#))
- Monitoring how their arm/body feels for the day and rate it.
- Charting their work for the day.
You could obviously add hundreds of other things that could be added or documented to the journal. Again, it’s all about the idea or concept of them taking ownership, accountability and making themselves AWARE.

There are many benefits to keeping a journal and I don’t think you would show up to take a test without being prepared and reviewing your notes. I don’t think you could have much success with your diet if you weren’t monitoring your caloric intake. I doubt you would have much success with either.

**However, very few baseball players do this!**

Why not? Here are the benefits of keeping a daily journal:

1. It relieves anxiety and the feeling of being unprepared when it’s game time.
2. It allows you to monitor and track progress.
3. It keeps your goals and focus in front of you at all times.

Maybe most importantly…..

**WHEN things go wrong, it gives you something to reflect back upon and see what you were doing when things were good.**

If you’re not sure what you should include in the journal, here a few ideas to help you get started.

1. How did I feel today?
2. What cues did I establish?
3. What did I learn about myself today?
4. What should be my focus tomorrow based on my feedback?
5. What were my strengths/weaknesses?
6. Did I get better today? How? Why?

In closing, you’re development is up to you! Development will speed up once players begin to take ownership and are allowed freedom within the team or coach’s structure.
Chapter 5:  
Giving Credit Where Credit Is Due!  
(My Story)

"Give credit to the people that helped get you to where you are!"

I've been working with pitchers for the past 17 years at various levels of the game. I've always challenged myself to learn something today that I didn't know yesterday. To be honest, it often creates a conundrum and leaves me scratching my head.

It can be humbling, insanely humbling, when you realize that....

**The more I learn, the less I know!**

I initially started my career as an instructor in Louisville, KY fresh out of college, bound and determined to not get a real job! Like most players, I wanted to stay in the game in some form or fashion as long as possible.

My best friend growing up was Todd Thompson and he had just been recently named the Head Coach at Central Hardin High School back in my home state of KY.

Once Todd was offered the job, he invited me to join him as the pitching coach and I was thrilled to coach at the high school level and be alongside a childhood friend. (By the way, since Todd Thompson arrived at Central Hardin, they have become a perennial power in KY High School Baseball, 2011 KY State Champs!)

A testament to the leadership, guidance and coaching expertise exhibited by Todd Thompson. He will someday end up in the KHSAA Hall of Fame and I'm proud to say that I was able to coach alongside him in his inaugural campaign!
While coaching at CHHS, I had the opportunity to meet Luther Bramblett during the KY High School State Tournament. Luther is the Head Coach of St. Catharine College in Springfield, KY and it was a junior college at that time. As we sat talking pitching, Luther asked if I was interested in becoming his pitching coach.

YES, I AM Luther! Was the immediate response, at least that's what I felt?

Luther is a "Baseball Guy" and he had single-handedly put together a national power at St.Catharine. Going into the job, I was a bit apprehensive and couldn't help but think,

"Am I ready for this?"

"Do I know enough to take on the reins at the college level?"

(If you're looking for a school with a reputation for developing players, check out St. Catharine College. I highly recommend Luther Bramblett and his staff!!)

The scenario lit a spark and suddenly I realized that there was so much I didn’t know and that I had so much to learn. Each night I sat in the dorm room spending countless hours (at $350 dollars a
researching the works of Tom House and many other nationally recognized pitching coaches.

Suddenly, it had become an addiction of sorts, I couldn't get enough information!

Over the next two years, seven players reached 90 MPH and the team that Coach Bramblett put together went 87-18! We were at the top of the national rankings in wins, ERA and many other categories. I hate to sound like I'm "that guy" but it was a testament to the players that Coach Bramblett had recruited.

Here are two of my favorite quotes concerning college baseball and recruiting:

"Good players make good coaches!" Jeff Forehand, Lipscomb University

"It's not the players you miss in the recruiting process that will hurt you; it's the ones you get!" Chris Finwood, Old Dominion University

While coaching at St. Catharine, I had the opportunity to meet Cliff Terracuso, better known as Cliffy T in the coaching world. Cliff had coached at St. Catharine the previous year and was at that time the recruiting coordinator for Lipscomb University. In my opinion, Cliffy is one of the better talent evaluators I've seen to this day. (By the way, ask any college coach in the South East and there's a good chance they are very aware of the the legendary Cliffy T. He's the kind of guy that once you meet him, you won't forget him.) Cliff is currently an Area Scout in central Florida for the Texas Rangers; no doubt he will do great things in that position!

The following year, I was offered the volunteer pitching job at Lipscomb University by Wynn Fletcher. Wynn is currently the defending national champion Head Coach at Central Alabama Community College and a brilliant baseball mind.

Need I Say More? Highly Recommend Wynn Fletcher!

While at Lipscomb, I had the opportunity to meet and learn from Derek Johnson down the road at Vandy. DJ was the most influential college baseball coach in America while at Vanderbilt. DJ is currently the minor league pitching coordinator for the Chicago Cubs. Absolutely brilliant pitching
guy, ahead of his time inside his thought process and ability to relate to players. The best I've ever seen at developing arms.

I can still remember meeting DJ for the first time and him telling me to check out Paul Nyman's work at Setpro.com.

Paul Nyman, who is that?

Obviously, I couldn't wait to get home and see what & whom he was talking about.

That first night, I hopped on the forum and was blown away, actually intimidated, by the amount of mind-bending information available. Incredible! Setpro changed, shaped, molded and created my philosophy of pitching mechanics (actually throwing mechanics as Paul refers to them). I spent hundreds of hours in front of the computer screen. It got to the point that my wife (Mandy) accused me of viewing something else, we won’t discuss that.

I quickly began implementing the philosophy of Paul Nyman with my staff at Lipscomb University and it changed my career, as well as my players.

Over the 4 year period at Lipscomb, we had 16 arms reach above 90 MPH and had an eventual 1st rounder in Rex Brothers, the current closer for the Colorado Rockies. None of that would have been possible had it not been for the work of Paul Nyman.

After Lipscomb, I spent two years at ULM before leaving to devote my time to my true passion, player development.

Over the past 10 years, which includes college baseball, private instruction and summer ball?

- 19 of my former pitchers have been drafted
- 4 are currently pitching in MLB
- 54 of my guys have reached 90 MPH plus
- 14 have reached 95 and above
- 2 this past year reached the century club, 100 MPH!

The reason I point this out and risk sounding like a dou***bag, is to convey to you that anything is possible once you:

- Step outside of your comfort zone
- Embrace new ideas and ideology
- Constantly search for new information
- Aren’t afraid to try new things
- And most importantly, understand that no two players should be coached to look the same!

Although, Paul can be credited with my philosophy on mechanics, there are countless others that should be named as well.
• Mandy Wheeler (Any coach will tell you that you're only as good as the woman beside you!)
• Jeff Forehand
• Butch Thompson
• Tom House
• Tony Robichaux
• Each and every player and coach that I've had the opportunity to spend time with and learn from

It's amazing how much you can learn just by watching and opening your mind to new ideas and information. I'm a firm believer that each pitcher has a unique way of throwing the baseball and the idea or premise that there's only one way to "do something" is asinine.

It's what's wrong with instruction today.

I'll stop there before I get on a rant.

Before I go, I just wanted to share part of my story with you and take time to give credit to those whom influenced my career and helped me get to the point I'm at today.

• Too often, as pitching coaches we acquire our information on a beg, steal and borrow mentality and take from others without giving due credit.
• To go a step further, I wanted to stress the influence and role that Paul Nyman has played on my beliefs and give you a gift that you can take with you the rest of your pitching, coaching and/or instructing career.

Thanks again for purchasing Pitching Mechanics MasterMind System, please reach out to me if I can help in anyway.

Lantz Wheeler / lantz.wheeler@gmail.com is the best email to reach me!