

# Working With a Pitcher's Mechanics

Dave Gasser

The first time that a person picks up something to throw, it is just something that they do naturally. They watch others throw, and they copy what they've noticed about the throwing motion. Usually, they are trying to hit something with whatever they have picked up. Early for me, I'd pick up rocks to throw in water or at a tree or at an unsuspecting bird. Sometimes on the playground, I'd pick up a pine cone and try to hit a fellow student during recess. The beginning of the throwing process is just a natural, organic thing.

At some point, if kids get their hands on a baseball and want to try playing catch, that becomes a new reason to throw something. Some people have developed a throwing motion that can get a ball to another person without them running down the street after it constantly. The ball pretty much goes where they aim it. Generally, these people are the ones that get selected to try pitching on youth baseball teams. A sort of natural selection has begun to take place. Some kids just naturally throw a ball straight and firm.

Now enter a coach or a well meaning dad. They want to help throw straighter so the prospective pitcher can throw more strikes and less balls. They want to help throw harder so the fastball is a genuine challenge to hit. They want to help throw off speed pitches so the hitters must adjust in ways that make it harder to be on time with their swings. All of the tips that are offered become something new that a thrower must consider and understand and apply and master to their throwing motion in order to get better results.

This process is very difficult to do well, and challenges both the player and the person trying to offer help. Timothy Gallwey's book, "The Inner Game of Tennis", explains the challenge coaches face when they are trying to improve physical performance in any sport. Self one is the natural ability within us to perform a task. Just look at someone doing it well, copy them in a fluid, athletic manner. Many a good pitcher has had early success without any teaching. Self two is the learning self. It takes verbal or written instruction in, works to transfer it into physical changes, and by repetition can make adjustments. For a while, this can be sort of step by step applications, which can lead to clunky "by the numbers" physical movements. Until this smooths out to create fluid movement, the results you get might not be better than the way self one has always done it.

Coaching requires understanding the challenges of trying to change physical mechanics. The first challenge is verbal overload. If you are bombarding a player with instructions, they get overwhelmed mentally and cannot process the instructions. You see this in golfers all

the time; if they have more than one swing thought in their minds, they can go from being a decent golfer to a hacker sometimes whiffing the ball. Anytime pitchers are not smooth and athletic and fluid with their delivery, velocity and location are challenged and the risk of arm injuries increases. So the first challenge is understanding the “order of operations” of throwing. What is the first thing that needs to be addressed. Once that has become natural, what comes next. One thing at a time must always connect with the next piece of instruction. If you have ever assembled a piece of IKEA furniture, you understand how things must be done in order or you have to take everything apart and start over.

The second challenge is truly understanding what a player is physically capable of doing at their stage of development. If you are working with an eight year old who can barely throw a ball forty feet with any accuracy, it is not the best time to experiment with different grips to maximize ball movement. When preparing to teach, I came across a learning theory that really helped my ability to coach. A Russian named Vygotsky explained his “zone of proximal development”. Holy cow, that’s a mouthful. Thankfully, it translates into very practical language. It simply means that when you are trying to help students learn, you must access what they are capable of learning based on their past experience and present knowledge, and offer them the next one thing that allows them to advance. Then they are ready for that next one thing. Such learning looks like scaffolding or a stairway. Slow and steady progress. The eight year old needs a four seam grip and then moving into a balanced position they can actually repeat to start them on the way. Your best players that throw hard and accurately need to start improving ball movement and experimentation with grips and slight adjustments to improve their velocity.

The third challenge is actually understanding the basics of pitching mechanics before you start offering suggestions. All too often, pitching instruction comes out like a random assortment of “tips” that a person has heard. They don’t really connect one to the other, and at times they seem to contradict the previous tip and create confusion and poor performance. The essential teaching question is what are the few things that are universally true that need to be emphasized? They are really the only things that need to be taught. Pitchers come in all shapes and sizes. If you look at good pitchers, you can notice many stylistic differences that work well for them but might not work well for someone else. Early in my coaching careers, I spent time teaching things that were merely style as “absolutes”. That muddied the water, helping some kids and forcing others to focus on something that hurt consistent performance. What really messes up pitchers is yelling style tips to pitchers during performance, getting them to try to focus under pressure on unhelpful, unnecessary ideas. Not helpful!

As soon as coaches take on the challenge of coaching a team, and that team takes the field

and keeps score, the need to create pitchers begins. The more guys you have that can throw strikes consistently, the better chance you have to play the game in a manner that is fun to play and watch. Walkathons are a nightmare for everyone. Once players can throw strikes, the next challenge is helping them change speeds. Once they can do that, helping them move the ball around in the strike zone to make it harder for hitters to square up the ball is important. Then, adjustments to improve velocity and ball movement on pitches becomes the priority. One thing at a time helps coaches have a plan for pitching development. That plan needs to understand the challenges for pitchers making changes to improve. The next article in this series will try to present the essential mechanics that need to be addressed with pitchers. I'll try to do it generally enough that more specific pitching instruction can be overlaid to fill in the sinews and muscle consistent with modern pitching instruction in a way that does not create any need to unlearn something developmentally down the road.