

Triple Jumping the JAC Way

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Introduction

Power ballet. Skipping stone. Bouncing ball. Adult hopscotch. The best way to injure your knees and back. One of the most dangerous events in track and field. These are all things that have been said about the triple jump. The triple jump is such an exciting event to watch when done properly. Athletes sprint down a runway at full speed, slowly gliding through the air only to briefly touch down a few times on their way to splashing down into a sandpit. Great jumpers have talked about the event like they are “stones, skipping across the water.” At the highest of levels it looks as if the jumper is walking on air. At the lowest of levels, it looks like someone’s hips are going to pop off, and you just hope they can make it into the sand pit! When done properly you feel like you are flying. When done improperly, you feel like you have been in a car wreck. This, my friends, is the triple jump.

I was drawn to the triple jump as a middle schooler who was watching the 1996 Olympic Games on TV, and I happened to see Kenny Harrison triple jump. I was in shock. It looked like he was walking on the air. Although I never looked like him while jumping, that moment of watching him jump got me hooked on the event. The mix of speed, power, technique and balance make the triple jump one of the most exciting events to watch, and any athlete who is dedicated to getting better and doesn’t mind some hard work are the perfect candidates for this event.

In my opinion, one of the most fascinating things about the triple jump is how many variables there are in the event. As the triple jump is a serial jumping event, each part of the jump is completely dependent on the preceding part. It is almost impossible to have a great first phase if the athlete’s approach is off. If they are reaching to get to the board, or leaning too far forward at takeoff, that will 100% affect the first phase. If the athlete puts their first phase leg down too early, that will 100% affect the distance and posture of the second phase. I really enjoy solving problems and riddles, and to me coaching the triple jump is just like solving one big problem. I have found that athletes who are not easily discouraged, and also see the event as one big problem to be solved, have the perfect attitude to become great triple jumpers.

The purpose of this article is to share with the reader the fundamentals of the triple jump, including some drills that we at the Jacksonville Athletic Club have used to really help our athletes. At the end of this article I have included a brief appendix, featuring some of our success stories. This is to give a little more insight into our coaching system, provide some examples of improvements we have seen in this event, as well as some lessons we have learned in coaching the triple jump.

How We Teach the Event

One of the most important aspects of the triple jump is rhythm. Rhythm of the phases, rhythm of the approach run, and rhythm of the arms and legs working in synch. A lot of beginner triple jumpers, whether 3rd graders or college freshman, have a hard time with the “twice on one leg, once on the other” sequence, but have no problem at all with “twice on one leg, twice on the other”. So we at the Jacksonville Athletic Club have always taught the event as a “quad jump” to help the athlete figure out which leg feels the most coordinated first, and then slowly over time we take out the last ground contact to get to the triple jump.

The first thing we do with a beginner triple jumper is have them start about 40 feet from the edge of the sandpit, starting with both legs together, and tell them to jump “twice on your left leg, twice on your right leg, all the way into the pit”. The first few times it can be extremely easy, just working on that rhythm. As they get more comfortable, we have them try to cover more distance on each jump, by pushing harder against the ground.

When the athlete gets comfortable with that rhythm of twice on one leg, twice on the other, and they are covering more distance on each jump, we ask them to pick which leg felt the most coordinated during that initial exercise. There are many different theories and practices on what leg to pick as your takeoff leg in the triple jump, but we have found that asking the athlete to pick the leg that feels the most coordinated is the one they should use as their first phase. It doesn't matter if they are left handed or right handed, doesn't matter what leg they kick a soccer ball with, what leg they long jump off of, or what leg they put in front when someone pushes them from behind (are people still doing that?). What matters is what leg is most coordinated for them, and this is a completely individual decision. The coordinated leg should be used as the takeoff / first phase leg, as the first phase is a much more complex skill than the other phases. Not only does the athlete jump twice off that leg, but syncing the arms and legs during the last few steps, takeoff, and off the board are all easier if they use the coordinated leg for that first phase. The other leg will only be used once during the jump, and we have found it is usually (not always) the leg the athlete long jumps off of.

After establishing the coordinated leg, we then have the athlete do the exact same thing (start from 40' from the sand pit) and jump twice on the coordinated leg, once off the non-coordinated leg, all the way into the pit. Just by taking away one of the contacts with that non-coordinated leg, all of a sudden they are performing a series of triple jumps. This method is great as you are able to find out their jump sequence by allowing the athlete to pick their coordinated leg, and within a few minutes they will be able to triple jump without really thinking!

Single Arm vs Double Arm

One of the great debates about the triple jump is which arm action to use throughout the jump. An entire discussion about this is beyond the scope of this article, but a general rule of thumb is to watch your jumper skip, bound, and hop during drills and see which arm action they use naturally. Without

thinking, if a jumper does single leg hopping or alternate bounding, they will perform one type of arm action naturally. They will pick something that is comfortable and seems coordinated for them. This is what arm action they should use in the triple jump, and you can easily identify this when watching the initial exercises discussed in the previous section.

Approach

The goal of the triple jump approach is for the jumper to bring as much speed as possible into and off the takeoff board, while being in a tall posture for the athlete to keep their speed and balance throughout the entire jump. The distance of the approach needs to be very individual, but the main goal is that the athlete is in a tall position, at top controllable speed, in a position to execute a long, balanced, first phase. For our high school athletes, we have most of our girls go from around 12-14 total steps (around 60'-80') and most of our guys go from around 14-16 steps (around 75'-95').

We advocate the athlete counting their takeoff foot every time it hits the track down the runway, in a certain way, to help them find a comfortable rhythm to their approach. We have our athletes count three different phases or parts of the approach run. The three phases we teach at the Jacksonville Athletic Club are an acceleration phase, a transition phase, and a tall phase.

For example, if a jumper is taking 8 rights (16 total steps) we would have them count a 3-2-3 rhythm, counting only their right leg (takeoff leg). They would be down and driving aggressively at the start of the approach (or "out of the back" as most coaches say) for their first 3 rights. After that they would "transition" from their driving phase to their nice tall position. This would be the next 2 rights in an 8 step approach. The final 3 rights the athlete would be up in a nice tall sprinting position, preparing to takeoff. If any athletes are familiar with the great video game "Mario and Sonic at the Olympic Games" this is very similar to the "speed lock" function, where you can't control the speed anymore for the jumper (or Italian plumber) for those last few steps, you are just maintaining your speed, staying nice and tall into the board, and getting ready to takeoff.

As the approach must have a rhythm to the run, it has to be practiced regularly. We at the Jacksonville Athletic Club do full length approach work 2-3 times a week, throughout the year, even in the first few weeks of training. Obviously the distance of the approach will change as the year goes on, but the rhythm will be the same. The first few weeks the athlete might even just walk the approach, counting out loud to get a feel for the rhythm, but it is practiced over and over and over so that when they need to compete and go for a big jump, the approach is automatic.

First Phase or "Hop"

After a fast approach, where the athlete is nice and tall a few steps out from the board, the focus for them should be to aggressively push off the board with their takeoff leg. The most important word we at the Jacksonville Athletic Club use in coaching the first phase is cuing the athlete to be "patient". We want them to patiently leave their takeoff leg behind them on the board, and then slowly bring their leg back around to out in front of them. A lot of beginner triple jumpers (at all ages) want to bring their first phase leg back down to the ground as quickly as possible, which obviously shortens the potential

distance of the first phase, as well as the overall jump. As one coach puts it, you want your first phase to be “reflexive”. The athlete should think about pushing the board aggressively behind them at takeoff, and then just slowly bringing the leg back around, in a motion that is much like pedaling a bike. Another good cue that helps when they are bringing their takeoff leg back around is to “step over the knee.” If the jumper thinks about stepping over their non-takeoff leg’s knee with their takeoff leg, it allows the takeoff leg to fully cycle around. A lot of first phases are cut short due to the takeoff leg not fully coming all the way back around. The hop leg needs to cycle all the way around, stepping over the knee, and then coming back aggressively with the foot moving underneath the body as fast as possible.

One good analogy to get the athlete to understand how fast the foot needs to be moving underneath them is to have them think about riding a skate board. When riding on a skateboard, the faster you move your foot, right underneath your body, the faster you go. Your toes will be up and to go really fast you reach your leg pretty far out in front of you, and then move that foot really fast right underneath your hips. If your toes are down when you strike the ground you might fall off the skateboard, or lose some of your momentum. If you strike the ground too far out in front of you, this will also slow you down as it is like putting on the breaks.

We want our athletes to have very far first phases. We want them to carry as much speed as possible into the next few phases, and we want them to be in a good body position for the rest of the jump. We don’t spend too much time worrying about the exact distance of that first phase, but as a general rule of thumb it should be about 35% of the total distance of the triple jump. For a 40’ jump it should be around 14’, a 50’ jump around 17’6”, etc. In practice when we jump from a short approach we usually have a cone on the side of the runway around where the first phase should be, but we don’t stress it too much.

Second Phase or “Step”

One thing I have learned in coaching the triple jump is that semantics are very important. We don’t want to tell our athletes what to do after they “land” on their first phase, or “land” on their second phase. Each time the jumper hits the ground it should be thought of “taking off” into the next phase, not “landing” on one phase. If they think of “landing”, it has a connotation that this is the final thing that has to be achieved. If they think about “taking off”, they will be proactive about being ready to jump again. That being said, as the jumper is taking off into the second phase, a few things should happen. First, that first phase leg should be trying to move as fast as possible underneath the hips as to conserve as much as speed as possible. The same time the hop leg is moving underneath the body, the opposite leg (step phase leg) should be moving upward and forward very quickly and forcefully.

The athlete jumps off their hop phase, drives up the opposite thigh as fast as they can to around parallel to the runway, and then just holds it there with their toes cranked up. One of the best explanations I have heard is that the second phase is like a “moving statue”. The jumper drives the free knee up, and then just relaxes and holds it there. I believe one world class jumper said he thought about “squeezing the knee” to hold it in place. Whatever cue works, the main goal is the same; to hold that position as

long as they can, in a balanced position. (See drills #2 and #3 in the drill section to see how we work on this).

As the jumper starts to descend back down to the track, their free leg (non step leg) and arms will be coming through very fast, with the jumper trying to get that jump phase foot underneath them as fast as possible (remember the skateboard). They are trying to conserve as much speed as possible and bring as much speed as possible into the next phase.

Third Phase or “Jump”

The faster the approach and the more speed that is maintained through the previous two phases, the longer the jump phase will be. The key to this phase is to get maximal distance based off of what speed is left. During the first two phases the jumper should be thinking “out” and during the 3rd phase the jumper should be thinking “up and out”. Takeoff fundamentals should be practiced with the athlete having their foot come underneath them as fast as possible, driving the free knee up aggressively, and blocking the free thigh parallel to the runway. The jumper then wants to get as tall as possible to delay the landing as long as they can. Both hands up over their head is a good way to elongate the body and delay the landing.

Triple Jump Drills We Use Frequently

There are literally thousands of drills that you can do for the triple jump (I know, I looked it up...). The biggest thing that you need to figure out is what drills you should do that will carry over the best to helping your jumpers jump farther. The ultimate goal of anything that you do in practice should be to help your jumpers jump as far as they can, from a full approach, in a competition. If they will be moving at high speeds in a meet, then you need to find a way in practice to simulate those kinds of speeds, impacts, and rhythms in practice.

Nathan Taylor, the great jumps coach from Cornell (who had back to back NCAA Champions in the triple jump, both guys who didn't jump over 46' in high school) once mentioned to me that the biggest way to help prepare the jumper for competition speeds is to do a lot of bounding drills, with speed behind them, on the runway. I will go into this later, but keep in mind that while traditional bounding and skipping exercises are great for strength work, conditioning, and general fundamentals, there has to be a focus in your training on how to bridge the gap between general exercises (which are indeed jumps specific) to jumping multiple times with lots of speed behind it.

1.) Kamau Drill- This drill was taught to me by Kamau Sullivan, triple jumper from Indiana University, who walked on jumping 39' (he didn't make it into the sand pit from the 40' board) and went on to jump over 54' post collegiately. It is a very simple drill, but a great way to work on a lot of key ingredients. You start with your non takeoff leg in front, rock back, and jump in the following sequence: takeoff leg – non- takeoff leg- triple jump. Also put, bound-bound- triple jump. For the right footed jumper, you start with your left foot in front, lean back, and then jump forward R-L-R-R-L into the pit. For the left footed jumper you start with your right foot in front, lean back, and then jump forward L-R-L-L-R into the pit.

The goal of this drill is to jump as far as you can, on each contact, pushing yourself forward. It is a very simple drill, but athletes really enjoy competing against each other on this drill. The key is to be as aggressive as you can on those first two bounds to generate some sort of speed and power into the triple jump part of the drill. There is no exact correlation, but we have found that girls who can jump over 52' doing this drill have jumped over 40' in the triple jump from a full approach, and boys who can jump over 64' doing this drill have jumped over 48' in the triple jump.

2.) Step-Hop-Jump- Most questions I get about the triple jump revolve around how to make the second phase longer. No one likes the answer of, "go back a phase to fix the phase that is problematic" because it is not a quick fix. A short second phase is 95% due to something that is wrong in the approach, take off, or takeoff into the second phase. When that is not the case, usually a second phase is short due to impatience in the air (rushing to get that foot back down to the ground) and being uncomfortable jumping off that leg. There is a reason why the athlete chooses to only jump off of that leg once.... A good drill to work on this is called the step-hop-jump drill. It is pretty much the triple jump in reverse!

Learning this drill will take some time, and will most likely be frustrating for the athlete starting out. Such common phrases as "I don't like this" "this is awkward" and "I can't do this" are commonly said while learning this drill. From a very short approach (10-20 feet starting out) the athlete will run up and then jump into the sand pit in the following sequence:

- If they triple jump RRL they will go RLL into the pit
- If they triple jump LLR they will go LRR into the pit

They will perform a long bound off the board, jumping off their normal first phase leg (so that is familiar for them) and then jump twice off the other leg. They will jump into the sand off the same leg they do when they triple jump, so that is also a familiar skill for them.

This drill is nice because it gives the athlete an opportunity to work on jumping off that leg (the "weak leg") as well as learning to be more patient in the air in their second phase. Again, the first few times they will try it it will feel awkward for them. The better they get with this they can add speed (longer approach) to make this more challenging.

3.) Hop-Step-Step-Step- Jump

This is one of the most important drills for the triple jump that we use quite often at the Jacksonville Athletic Club. Early on in the year we do this from only a few step approach (15'-25') and getting close to championship season time, some of the jumpers will be coming from a 10-12 step approach (60'-70') The athlete will perform a triple jump with 2 additional step phases before they enter the sandpit.

This drill is much easier to learn than some of the others, as you start the first jump with your normal hop phase leg, and enter the sand off the same leg you would in the triple jump. The added two step phases are to help the athlete get used to trying to create speed between the phases, as well as getting used to being patient in the air. We commonly use the phrase "patient in the air, fast at the ground" when coaching this drill.

A R-R-L jumper would go R-R-L-R-L into the pit, and a L-L-R jumper would go L-L-R-L-R into the pit.

Sample Training

As this is not a training article I will not be providing in-depth training for the triple jump, but as a rule of thumb, we at the Jacksonville Athletic Club follow the principals of general to specific in our training, especially when it comes to what type of “jump work” we use. In the fall, our athletes will do a lot of traditional single leg bounding exercises in the grass, into the sand pit, up bleachers, etc. They will do these 2-3 days a week, building up to some pretty high volume. As the year progresses all of the bounding exercises become less in volume, but much higher in intensity. Single leg hops up 15 bleacher steps might progress to 5 right legged hops into the sand pit from a 20’ approach. Alternate leg bounding down the football field might progress to the hop-step-step-step- jump drill mentioned earlier from a 40’ approach a few weeks before the state meet. All fall and winter (as we aren’t competing in many indoor meets) we do a lot of high volume bounding and as soon as the high school season starts (late January here in Florida) we are working on helping the athlete being able to bridge the gap from the new found speed and strength gains into being able to handle jumping and bounding at high speeds. That is the number one goal for all of our triple jumpers; keeping their speed throughout the entire jump, from takeoff to dirt.

As the triple jump as a whole is a very complex skill, it must be rehearsed, in its entirety, on a consistent basis. This by no means advocates jumping all the time in practice, or jumping from full approaches in practice. Both of which are quite risky and can lead to injury. The job of the coach is to make sure the training is balanced, so that the jumper is able to have some days where they take a lot of jumps from a short approach, or perform a lot of high speed bounding drills, while still doing other activities on different days that compliment and help the athlete.

A more detailed explanation of how we at the Jacksonville Athletic Club set up our weekly training can be found below, but one point of emphasis in the training of our triple jumpers is the time spent and focus on doing whatever we can to help the athlete feel comfortable doing lots of high speed bounding / jump drills on the runway. What they are doing has to match the demands of the event, the speed of the event, and the rhythm of the event. It is a great error to practice a lot of low intensity and general drills away from the runway and then try to expect your triple jumper to jump far in competitions. The gap between skipping drills and full approach jumps in a meet is way too broad, so you must do things in training to bridge that gap.

http://www.jaxtrack.com/uploads/Training_Considerations_for_Jumpers.pdf

Final Thoughts

The triple jump is one event where we have had a lot of success over the past few years, and I believe this is due to how we teach the event, and how we train our triple jumpers to be better athletes first, and then focus on the “triple jump stuff.” We have found drills and exercises that work, and we are able

to have our athletes buy into our system of teaching the triple jump. As you will see in the appendix, most of the success comes from the athlete, wanting to get better, doing what is necessary, and trusting the program, even when others are telling them not to do the triple jump. This event is no more dangerous than any other event, but how you teach it and coach it can make a huge impact in the athlete's success in the event.

Thanks

The triple jump is an event that is very near and dear to my heart. I have had many coaches and mentors throughout my career as an athlete and coach, and I am so very thankful and grateful for all of these people who have inspired me, coached me, and taught me. Thank you to the following:

Robert Olesen, Bryan Delsite, Brandon Uhl, Noel Ruebel, Drew Hardyk, Jonathan Edwards, Peter Stanley, Kamau Sullivan, Allen Simms, Dr. Jim Patchell, Theresa Cardone, Wayne Pate, Greg Thiel, Dick Booth, Mike Conley, Willie Banks, Kelly Ziegler, Christian Olsson, Boo Schexnayder, Kenny Harrison, Khristo Markov, Joe Walker Jr., and Nathan Taylor.

Appendix: JAC Success Stories

R.B.- 1st year triple jumper who became state champion, went onto become NCAA All-American – This athlete came to us at the start of the high school track season of his senior year. He was a very fast 100m and 200m sprinter who had long jumped a few times too. He was around 6'3" and very powerful. He was told the triple jump was too dangerous, he could get hurt, and that his main events should just be sprints. With much encouragement from us he did the triple jump in a meet, and in his first meet he jumped 40'8". Three months later he was able to jump 46'1", and then four months after learning how to triple jump, he was able to win the state meet jumping a PR of 47'8". This athlete is currently a sophomore in college, with a 25'1 ¼" PR in long jump and 53'8 ¼" PR in triple jump. Lesson learned? The importance of talent identification, and encouraging athletes to do what they can be the best at long term.

B.B.- Back-to-Back state champion who went on to be a collegiate conference record holder- This athlete came to us during her sophomore year of high school. She came from a competitive cheer background, had some early success from natural talent, but almost quit the sport during her sophomore year due to lack of improvement and coaching. Due to her background in cheer and learning certain cheer routines, repetition and whole skill rehearsal were very important for her. With her we did more full approach work and more jumps in practice than we usually do, but that was what helped her, and how she learned the best. She went on to win back-to-back state titles in the triple jump, ended up having a collegiate PR of 42'4" and even broke her conference's triple jump record! Lesson learned? Coach the athlete, not the event. She required more reps and "non-traditional" training than I was used to, but it was what worked for her, and so that is what we did. This allowed her to stay interested in the sport, and also lead to her peak in college.

N.G.- 1st year triple jumper who became state champion- This athlete came to us the summer after her junior year in high school as an experienced high jumper (PR of 5'10"). Shortly after working with her,

we noticed she would also be good in the horizontal jumps. She showed much hesitation in the triple jump, as she was told from previous coaches that it would hurt her high jump success, as well as most likely to lead to getting her injured. She was told it was very bad for her knees and back. In her first meet as a triple jumper she jumped right at 38' and just a few months later at the state meet she jumped a PR of 40'2" to win the state meet! During that same year she was also able to jump 20'5" in the long jump and 6'1 ½" in the high jump. The training for the triple jump was able to make her a better high jumper. Even better, she was able to be 100% injury free the entire year! This athlete went on to become NCAA champion in the high jump a few years later. Lesson learned? Go with your gut. Because she was a high-profile athlete, a lot of people told me to stay away from the triple jump with her due to risk of injury. I was confident that if she was trained properly, she could excel in all three jumping events.

C.J.- Multiple sport and event athlete to state champion- This athlete came to us as a very talented middle school pole vaulter and hurdler who had also briefly triple jumped. Most of her training for her first few years of high school was for the heptathlon, and each year improved some in the horizontal jumps. After we (athlete and coach) decided to spend more time on the horizontal jumps and less on the heptathlon, she was able to jump over 20' in the long jump, and 40' in the triple jump. Her sophomore year she lost the state meet in the triple jump by 1 inch and she kept working hard to achieve her goal of becoming state champion. Her senior year she was able to jump 40'4" (not touching the board) to win the state meet by only 1cm! Lesson learned? The more events or skills learned early on, the better it is for the long term development of the athlete. Also, don't give up!