Hurdle
Technique & Drills

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5 Myth’s about Hurdling

- Speed is not a necessity to hurdle fast
- Good form not “pure” speed makes a good hurdler
- An athlete that can’t jump, throw, or sprint will make a good hurdler
- Tall athletes make the best hurdlers
- Drill’s don’t do much, we just hurdle full speed during practice
Mission Statement

Through correct training & education, to reduce the time spent on ground or in the air by 0.01 second or more for each stride taken.

Mission Statement Cont....

Example:

An average collegiate female hurdler that takes three strides between hurdles in the 100 hurdle race will take 51 strides during a race. If that athlete has a PR or 14.49 and they make a 0.01 second improvement per stride that will lead to a .51 improvement making her new PR 13.98!
Hurdling is Sprinting

- The hurdle races are sprint races with barriers
- Your best hurdlers should also be some of your best sprinters running on relays.
- Without speed success is limited, but not unattainable
- Technique with a little speed will lead to some success.

Hurdling is a faultless sprint over barriers

- How fast an athlete runs is limited by the technique he/she has developed
- The better the technique the faster the athlete will run.....WHY?
- Technique alone will not beat speed but...Technique with speed will beat speed alone
Technique is learned through motor education

- We know that hurdling technique can be learned through “training” the motor units
- Learn technique at a slower speed first!!!
- Once the technique is learned the correct way at slower speeds, it is much easier for the athlete to perform the drill/technique at a faster or maximum speed

Improvement by specific training

- Training the motor units to the hurdle events are key
- Four specific areas to focus on when developing practice plains
  - Reaction Time
  - Acceleration
  - Maximum Speed
  - Speed Endurance
The Hurdle Technique

Four parts of the hurdle technique

1.) The Start & Approach
2.) Take-off to the hurdle
3.) Clearance
4.) Landing & Step off of the hurdle
The Start & Approach

- A good start & acceleration is a must
- The hurdle start and sprint start are the same.
  - The only difference is the hurdler must come up to a taller position out of the drive phase quicker than a sprinter

The Start & Approach Cont....

- In the 100/110 hurdle race we need to take an even number of steps to the first hurdle (8 steps)
- The lead leg will always be in the back of the blocks
The Start & Approach Cont.

- For the 300 hurdle race the number of steps to the first hurdle and the number of steps between the hurdles will be dictated by the athlete's ability and strength.
- After finding the athletes' steps in practice, you should have the athlete work on moving to a tall sprinting position two strides out from take off.
- These last two strides need to be aggressive with the athlete attacking the hurdle.
Take-off to the first hurdle

- The take off to the first hurdle may be the single most important aspect of the hurdle race. Good take offs to the hurdles will lead to faster times.
- The take off should be a continuous acceleration through the hurdle.
- The take off should be between 6 ½ to 7 ½ feet behind the hurdle.
- This may vary depending on the athletes abilities.

Take-off to the first hurdle Cont.…. 

- If the athlete takes off too close to the hurdle it will force the athlete to have a higher clearance over the hurdle resulting in a slower and longer flight over the hurdle.
- If the athlete takes off too far from the hurdle the athlete will lose speed, hit hurdles, and then they will want to “over stride” to the next hurdle.
Take-off to the first hurdle Cont.

- The take off foot should be placed on the track aggressively and underneath the hips to help the athletes momentum going forward.

**THE ATHLETE SHOULD ALWAYS LEAD WITH THE KNEE**
- This action should be a driving motion toward the hurdle board.
- The lead foot should be dorsiflexed

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Take-off to the first hurdle Cont.

- The head and the shoulders will lead the body over the hurdle. The Shoulders should be slightly in front of the hips.
- This will result in a “natural” lean of the body.
- Shoulders & hips are always square to the hurdle and going down the track
Take-off to the first hurdle Cont....

- The arms should resemble that of a sprinters.
- The only modification is to allow the lead leg to come through the arm pit.
- The lead arm should never be reached out toward the lead foot
- Both arms should never cross the midline of the body

Take-off to the first hurdle Cont....

- If one or both of these occur it will results in over rotation at landing

Remember
- Hurdlers are Sprinters

- So we must look like sprinters ever over the hurdle
Take-off

Questions?
Clearance

- When the athlete attacks the hurdle and is aggressive at take-off this allows the center of gravity to be as flat as possible
- This will help to keep the hurdle technique close to that of a sprinter
- A quick lead leg is important to running fast times

Clearance Cont.....

- Once the athlete is airborne the peak of the parabolic flight is BEFORE you reach the hurdle
Clearance Cont.....

- The lead leg should never be fully extended, there should be a slight bend at the knee to allow a fast efficient landing.
- Once the lead foot as cleared the hurdle a “snapping” down action or “pawing” action needs to happen.

Clearance Cont.....

- The trail leg is long off the ground and then is pulled tight into the buttocks with the toe pointing out to the side.
- When the hips clear the hurdle, the trail leg is then pulled through quickly and finish in the high knee position.
- Again, once the trail leg leaves the ground it is to tucked and remained tuck through the entire movement.
Clearance Cont.....

- Arm look like sprinter arms
- Once the trail leg starts to come through, the lead arm will sweep back raise slightly to allow the trail to come through and “pop” back into a sprint position
Landing & Step off the hurdle

- The landing distance off the hurdle of both the 100/110 & 300 hurdle races should be about 4 feet.
- The athlete should always have that “snapping” or “pawing” back motion off the hurdle. This will help the athlete to accelerate to the next hurdle.
Landing & Step off the hurdle
Cont. ....

- At landing both the lead and trail foot should be dorsiflexed
- The heal of the lead foot should never make contact with the ground
- At the point of contact, the lead leg should be fully extended with the knee over the toes
- This allows the center of gravity to be directly over the foot letting the athlete have a more powerful step off the hurdle.

Landing & Step off the hurdle
Cont. ....

- The body should be straight with the shoulders slightly in front of the hips
- The trail leg should be in front of the body in a “high” knee position
- NEVER have the athlete reach with the trail leg after landing.
- The trail leg should be driven back down to the track under the hips
Landing & Step off the hurdle

Questions?
Drills:
Why they are important!

- Use drills every hurdle practice
- Make them a part of the warm-up
- Drills isolate a certain movement so the coach/athlete can work on one part of the hurdle technique

Drills:
Why they are important!

- Make the athletes learn drill at a slow speed first
- Once the motor units have been trained, then the drill can be performed at a faster speed
- Emphasize to the athlete that the hurdle form does not change from drills to running full speed over the top
The most common hurdle question.
How do I make my hurdler three step?

➔ Ask your self the following questions:
  – Is my athlete strong?
  – Does my athlete have pure speed?

If the do not have either one they should be hurdling?

If the has one or both be sure to work the athletes weaknesses first while touching on his/her strengths during practice.

The most common hurdle question.
How do I make my hurdler three step?

➔ Do not have the athlete over stride between the hurdle
➔ Sprinting is a pushing movement not a pulling movement. (Work on good sprinting form between hurdles)
➔ Lower the hurdles and bring them in closer so the athlete has success.
➔ Once they have success raise and gradually move the hurdles back out.
➔ HIT THE WEIGHT ROOM!
QUESTIONS???

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