

### Teaching Pole Vault

#### Bending the Pole

##### 1. Choosing a pole

The size of the pole will depend upon the weight and height of the vaulter. The vaulter must be able to grip the pole close to the end otherwise it will be extremely difficult to bend.

##### 2. The Run-up

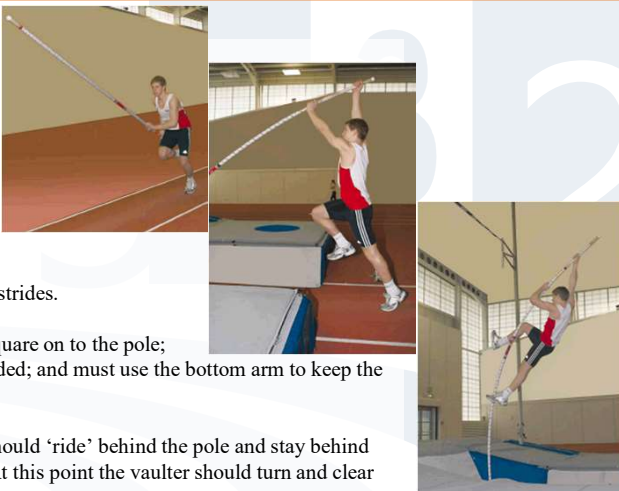
The run-up should be from 6 to 8 strides.

##### 3. Plant

At the plant the vaulter must be square on to the pole; must have the top arm fully extended; and must use the bottom arm to keep the body away from the pole.

##### 4. Take-off

At and after take-off the vaulter should 'ride' behind the pole and stay behind the pole until the bar is reached. At this point the vaulter should turn and clear the bar.



### Vaulting Poles

- All athletes now use fiber glass vaulting poles for both training and competition.
- Poles vary in length from 3.10m (10'4") to 5.20m (17'1") and are manufactured to suit athletes' bodyweights from 40kg (90lbs) to 100kg (220lbs.)
- Selection of the right pole specification is vital. The athlete should choose a pole so that he or she can grip in the top 15cm (6") of the pole and one that is the right weight to allow a successful vault to take place. If the pole is too long or too stiff, the athlete may fail to reach the landing area, possibly sustaining serious injury. If the pole is too soft the athlete will either fail to carry out an effective vault or break the pole.
- Poles must be properly cared for. They must not be allowed to fall against hard or sharp objects and should not be left lying on the ground in case an athlete wearing spiked shoes treads on them. The bottom 15cm (6") must be bound with protective tape to prevent damage to the pole when it bends and strikes the back of the plant box.

# Pole Vault

### Pole Vault Basics

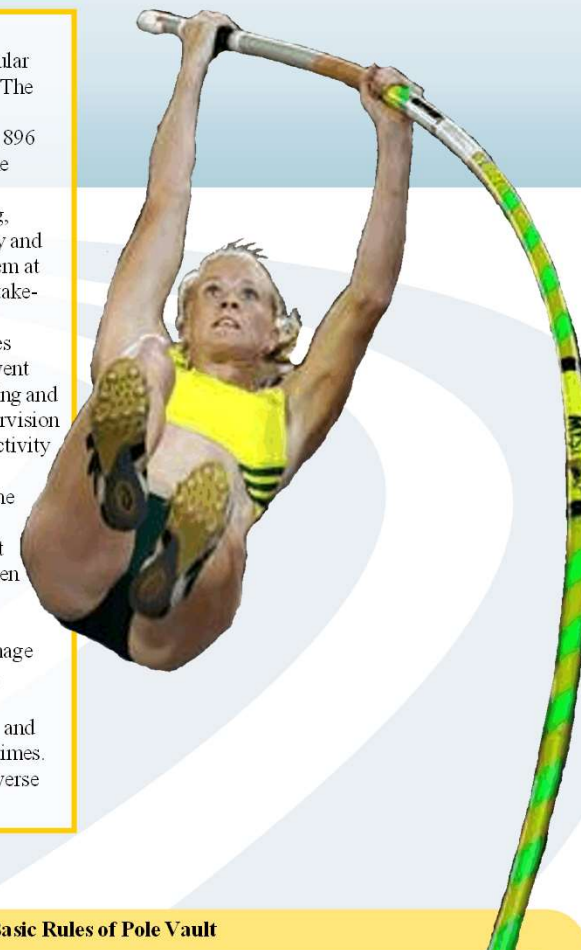
The pole vault is one of the most spectacular and thrilling of all track and field events. The men's event has featured in the modern Olympic Games since their inception in 1896 while the women's event was added to the Olympic program in 2000.

The best pole vaulters are tall, fast, strong, brave and agile with great jumping ability and able to learn complex skills and apply them at the end of a speedy run up and powerful take-off.

Good all-round games players and athletes make the best pole vaulters and it is an event best learnt in the early teens. Basic teaching and learning should take place under the supervision of a qualified coach. In the early stages activity will be confined to the use of a straight pole and initially a sand pit is the most suitable landing area.

The importance of safety in the pole vault cannot be overemphasized. Sand pits, when used for teaching purposes with straight poles, should be well dug and free of dangerous objects, poles checked for damage and handled carefully to prevent damage.

Landing areas must meet the minimum requirements in terms of size (see below) and must be securely fastened together at all times. Pole vaulting should not take place in adverse weather conditions.



### Basic Rules of Pole Vault

- The landing area must measure not less than 5m x 5m x 0.80m behind the box.
- The two protection pads on either side of the box must measure less than 2m from the back of the box
- The stands may be moved to a maximum of 80 cm away from the back of the box.
- The run up must be level, between 1.22m and 1.25m wide and must measure not less than 40m long.
- A competitor is allowed three consecutive attempts at each height.
- A competitor is excluded from participating further in the competition if he or she has three consecutive failures.
- Failures are recorded if a) the competitor dislodges the bar and it falls to the ground following an attempt b) the competitor touches the ground, including the landing area, beyond the vertical plane of the upper part of the box, with any part of the body or with the pole without first clearing the bar c) the competitor, after leaving the ground, places the lower hand above the upper one or moves the upper hand higher up the pole and d) during the vault steadies or replaces the bar with a hand (s).

## The Pole Vault Technique

### (a) The Grip

For the right-handed vaulter the pole rests on the thumb of the left hand with the fingers loosely curled round the pole. The upper end of the pole rests between the thumb and the fingers of the right hand with the fingers either open or closed round the pole.

### (b) The Carry

For the right-handed vaulter the right hand will be positioned close to the right hip with the arm bent at right angles. The position of the left arm will depend upon the length of the pole and the length of the run-up. The longer the pole and run-up, the higher the front tip of the pole will be above the ground, the closer to the body will be the left hand and the higher the left hand.

With run-ups between 16 – 20 strides and 4.90m poles, the pole at the commencement of the run-up will be almost vertical and the right hand will be to the front of the right hip. With this carry it is imperative that the vaulter begins to lower the pole as soon as the run commences.

### (c) The Run - up

The run-up will be from 10 to 18 strides depending upon the age and ability of the athlete. The run up should be a smooth acceleration in order that the vaulter arrives at the take-off point at optimum speed. During the run-up the pole should be progressively lowered in order that the pole tip can be smoothly planted in to the vaulting box.

### (d) The Plant

#### 1. Body Position

At plant the body should be square on to the front, hips forward, chest up, with the left foot (right-handed vaulters) directly under a fully extended right hand.

#### 2. Action of the Arms

The right hand will initiate the plant action by rolling over and up passing just in front of the right ear by the time the right foot makes first contact with the ground. The left arm should act as a pivot during this phase and as the right hand reaches the level of the right ear should move in an upwards direction until both hands are as high as possible. The arm action should be slow to fast and the right arm should be fully extended above the head as the left foot makes contact with the ground and just prior to the pole tip hitting the back of the box.

### (e) The take - off

At take-off the right knee should be driven forward and up and the vaulter should maintain a fully extended body position through the left ankle knee and hip. The vaulter must drive forcefully off the ground in a similar manner to the long jumper.

### (f) The Swing

During the swing phase the vaulter keeps the body fully extended from the right hand down to the left foot. The right leg should remain flexed.

### (g) The rock back

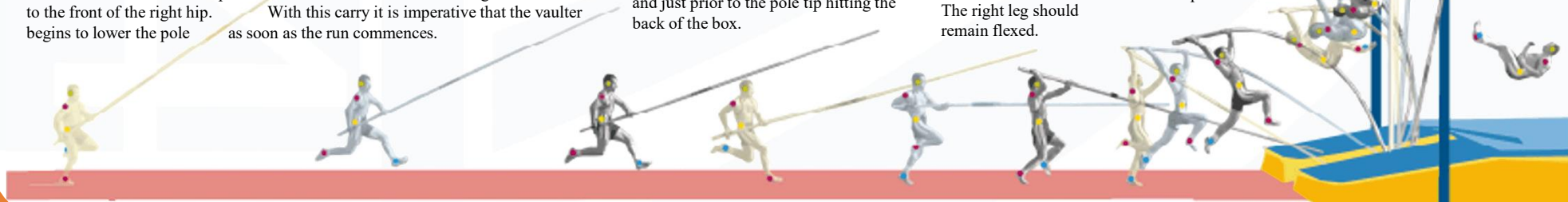
As the vaulter reaches a horizontal position both legs are flexed and the vaulter's back will be parallel to the ground.

### (h) The extension

During the extension phase the hips must be actively thrust upwards as the vaulter pulls on the pole. The vaulter's body should stay close to the pole in an extended position. The pulling action should be delayed as long as possible with the hips vertical and the pole almost straight. The turn is initiated as the vaulter reaches a fully extended position.

### (i) Bar clearance

During the bar clearance the body should be piked, elbows pointing outwards.



### Posture

Athletes must be taught the importance of the correct posture during run-up, plant and take-off from the beginning. Hips should be forward, knees should drive up with thigh reaching parallel to the ground and foot should strike with toes up.

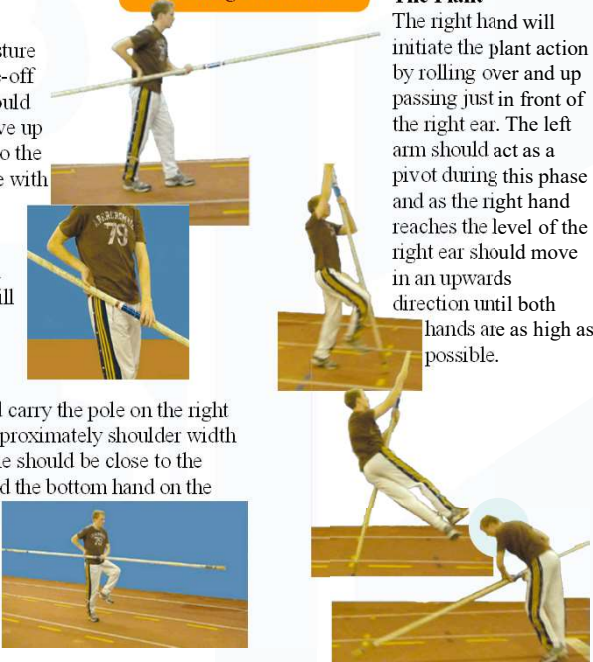
### Grip

A simple top hand under and bottom hand over the pole will suffice at this stage.

### Carry

Right handed vaulters should carry the pole on the right side. The hands should be approximately shoulder width apart, the top hand on the pole should be close to the right hip, arm bent at 90°, and the bottom hand on the pole should be close to and in front of the body with the arm bent at 90°. The pole tip should be at or just above head height.

## Teaching Pole Vault



### The Plant

The right hand will initiate the plant action by rolling over and up passing just in front of the right ear. The left arm should act as a pivot during this phase and as the right hand reaches the level of the right ear should move in an upwards direction until both hands are as high as possible.

### The First Steps

#### 1. On the ground

Hold the pole almost vertical in front of the body. The top hand on the pole should be just over head height. Take 2 steps, place the pole vertically on the ground, place the left foot close to the base of the pole, jump from the left foot, swing past the pole on the right side, turn and land on feet facing the direction you started from. Left handed vaulters should grip the pole with their left hand at the top of the pole, take-off from their right foot, and pass the pole on the left side.

#### 2. Into a sand pit

A similar exercise can be performed into a sand pit. The run-up can now be from 4 – 6 strides. At 6 strides the correct carry should be introduced and greater emphasis on a fully extended right arm should be made.

