

**AAHPERD Presentation March 18<sup>th</sup> 2010**  
***JumpFit: Rope Skipping for Conditioning and Fitness***

**Presented by Elizabeth Way**  
**Co-Presenter: Shannon Fox**

**Goals and Objectives:**

Participants will learn how to incorporate rope skipping into intermediate/senior athletics training and PE classes through conditioning exercises, sports directed skills and combinations. Modifications to low impact/no rope movements will also be explained to allow for greater inclusivity.

**Presentation Overview:**

- Rope Types and Sizing
- Biomechanics of Jump
- Teaching Progression
- Skills for Drills
- Drill: Walls – Agility/Coordination
- Drill: Box – Lateral Stability/Coordination
- Drill: 10 up, 10 down – Speed and Power
- Drill: Double Under Challenge – Strength and Power
- Drill: Ladder Hop Scotch – Agility
- 10 Minute Challenge
- Modifications for Inclusivity
- Adding Difficulty

**For More Information, contact:**

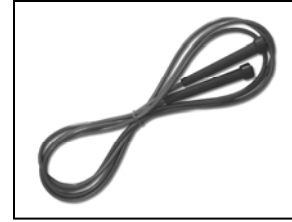
Liz Way – [liz@jumprope.com](mailto:liz@jumprope.com)

**About Heartbeat Enterprises Incorporated:**

Since 1983, Heartbeat Enterprises Inc., has been distributing high quality skipping ropes and learning resources. All products are made in Canada and the USA. Our speed ropes undergo regular repetition and stretch testing. Our beaded ropes undergo regular impact testing. All beaded and speed style skipping rope handles are shatter resistant. All products are guaranteed against defects in materials and workmanship.

## Rope Types and Sizing

**Speed-Style Ropes** are lightweight and easy to turn. They are advisable for group class purposes, as these ropes are easily adjustable for use in multiple classes (by tying knots) where participants vary in height.



**Fitness & Training Speed Ropes** are similar to the standard speed style ropes with larger handles and heavier cord.



**Beaded-Style Ropes** are not as easy to adjust for multiple users but the added weight keeps a good turning arc and the sound of them hitting the floor helps develop rhythm. These ropes are best for outdoor programs.

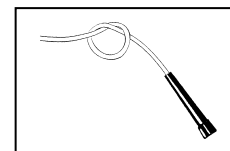
Choose from 7, 8, 9 or 10 ft. lengths depending on the height of the individual (see chart below). Speed-style ropes are best for multi-user purposes since they are easily shortened (tie knots to adjust) for different participants

### General Guide

Rope Length	Participant's Height
7 ft.	up to 4 ft. 10 in.
8 ft.	4 ft. 10 in. - 5 ft. 3 in.
9 ft.	5 ft. 4 in. - 5 ft. 10 in.
10 ft.	5 ft. 11 in. and over

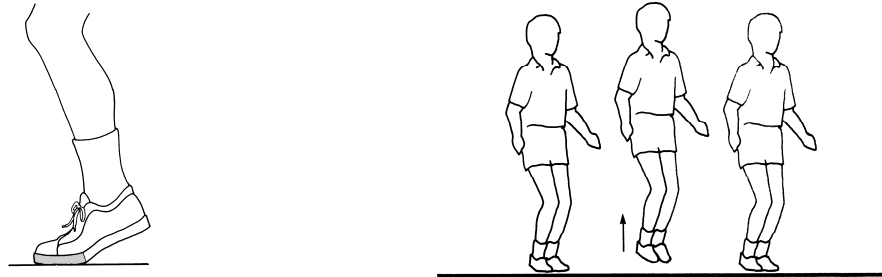
To determine the approximate rope length for an individual participant, stand on the centre of the cord. The handle tips should reach to the armpits. As the rope is jumped, it should just brush the floor beneath the feet. If the cord doesn't touch the floor, the rope is too short. If the cord hits the floor in front of the skipper, the rope is too long and should be shortened. Note that more experienced participants will hold their hands lower which requires a shorter rope.

To shorten a speed rope, place a knot in it as seen here.



To shorten a beaded rope, untie the knot, remove beads and retie.

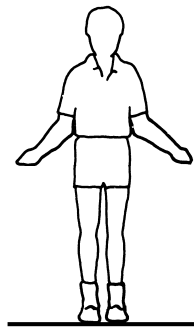
## Biomechanics of Jump



To perform a Two-Foot Bounce, the participant keeps both feet together and uses low, relaxed bounces (only high enough for a rope to pass under) with soft landings. Participants should occasionally put their heels on the ground as they land, as this will help prevent the shortening of the Achilles tendon and avoid discomfort and injury.

Participants keep their elbows close to their body. Hands are 10 to 12 in. away from the body (palms facing forward) and a little below waist height.

Note the posture of the jumper. Head is facing forward, shoulders back, abdominals are activated, posture erect. A common error is for a jumper to roll the shoulders and lean forward.



Ensure that there is appropriate space around the jumper – the participants can reach out arms and if they are not touching another participant, enough space is available.

Indoor and outdoor hard, smooth surfaces are appropriate – however, wooden flooring is optimal.

## Teaching Progression:

### Two Foot Bounce:

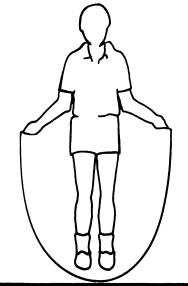
1. Jump with no rope to ensure proper jump
2. Jump with rope swung at side for coordination of jump and turning
3. Toe catch
4. One jump → two jumps → 10 jumps → 20 jumps → 50 jumps → 100 jumps

Further skills:

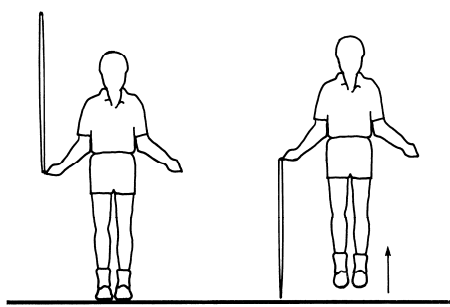
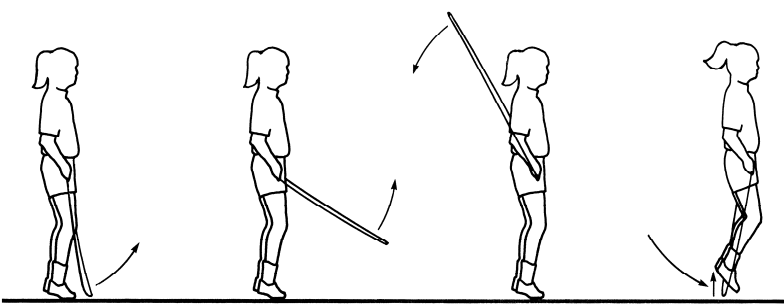
1. One foot skills (take off and land on one foot)
2. Basic arm actions (side swing and front cross)
3. Rotations (body pivots to change direction)
4. Advanced arm actions (intricate arm actions)
5. Advanced strength skills (consecutive and multiple double unders)
6. Combined skills (combinations of the above).

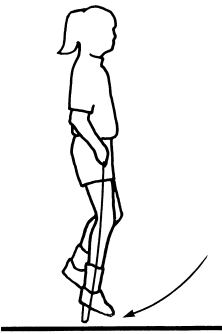
Note: this workshop will only cover skills pertinent to drills discussed

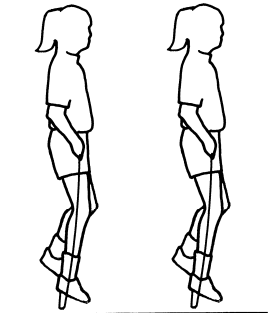
### Basic Skills

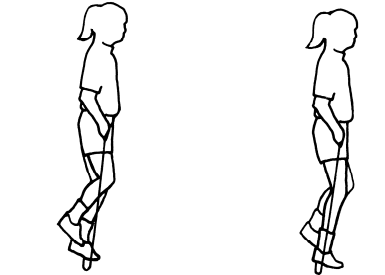
Two-Foot Bounce	Technique	Common Errors	Teaching Tips
	<ul style="list-style-type: none"> <li>-posture is erect, looking straight ahead</li> <li>-legs are together</li> <li>-take off and land on both feet</li> <li>-jump over the rope on each turn</li> </ul>	<ul style="list-style-type: none"> <li>-jumping too high</li> <li>-heavy landings</li> <li>-poor posture</li> <li>-poor arm actions</li> </ul>	<ul style="list-style-type: none"> <li>-land softly on the balls of the feet, putting the heels down occasionally</li> <li>-avoid looking at the floor</li> <li>-use small wrist turning action</li> </ul>


### Backwards Skipping

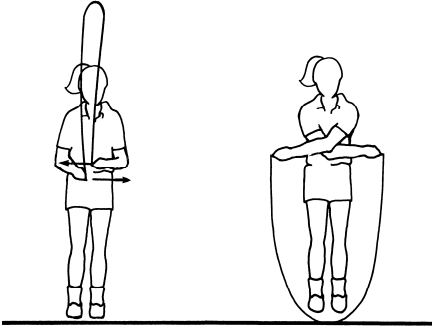
	
<p>Turn the rope backwards <b>BESIDE</b> you and practice jumping to match.</p>	<p>Begin with the rope in front of the feet. Make one large, backward arm circle, then continue turning the rope using the wrists.</p>

One-Foot Bounce	Technique	Common Errors	Teaching Tips
	<ul style="list-style-type: none"> <li>-posture is erect</li> <li>-jump repeatedly on one foot on each turn of the rope</li> <li>-practice jumping on the other foot</li> </ul>	<ul style="list-style-type: none"> <li>-irregular rhythm</li> <li>-kicking heels back</li> <li>-bending over</li> </ul>	<ul style="list-style-type: none"> <li>-leader claps a rhythm to match</li> <li>-look forward at a spot on the wall for concentration and posture</li> </ul>

Boxer	Technique	Common Errors	Teaching Tips
	<ul style="list-style-type: none"> <li>-posture is erect</li> <li>-jump twice on each foot (2x on right, 2x on left...)</li> </ul>	<ul style="list-style-type: none"> <li>-irregular rhythm</li> <li>-kicking heels back</li> <li>-difficulty switching from one foot to the other</li> <li>-foot after each pair of jumps</li> </ul>	<ul style="list-style-type: none"> <li>-leader claps a rhythm to match</li> <li>-reduce number of One-Foot Bounces on each foot until the skipper is jumping twice on each foot</li> </ul>

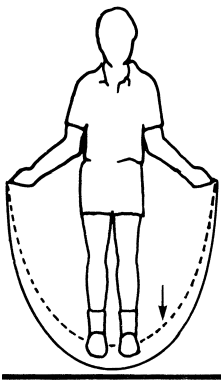
Alternating Step	Technique	Common Errors	Teaching Tips
	<ul style="list-style-type: none"> <li>-jump alternating feet from left to right, left, right</li> <li>-posture is erect</li> <li>-begin slowly and gradually increase speed as skill improves</li> </ul>	<ul style="list-style-type: none"> <li>-irregular rhythm</li> <li>-kicking heels back or out</li> </ul>	<ul style="list-style-type: none"> <li>-leader claps a rhythm to match</li> <li>-reduce number of One-Foot Bounces on each foot until the skipper is jumping once on each foot</li> </ul>

High Step	Technique	Common Errors	Teaching Tips
	<ul style="list-style-type: none"> <li>-do a Two-Foot Bounce, then raise one knee, Two-Foot Bounce, raise the other knee...</li> <li>-keep body weight over jumping foot for balance</li> <li>-raise knee to at least waist height, point toe</li> </ul>	<ul style="list-style-type: none"> <li>-irregular rhythm</li> <li>-slow weight transfer</li> <li>-not raising knee high</li> <li>-losing balance</li> </ul>	<ul style="list-style-type: none"> <li>-look forward at a spot on the wall for concentration and posture</li> <li>-leader claps a rhythm to match</li> <li>-begin with a “low” raised knee to help keep balance and gradually increase height</li> </ul>

Front Cross	Technique	Common Errors
	<ul style="list-style-type: none"> <li>-as the rope goes over the head, stretch to cross arms in front of body</li> <li>-jump through the loop created by crossing arms</li> <li>-arms uncross as the rope goes over the head on the next turn of the rope</li> </ul>	<ul style="list-style-type: none"> <li>-rope loop too small to jump through because elbows not touching</li> <li>-holding crossed arms too high or too low</li> <li>-catching a foot in the rope</li> <li>-pointing handle tips up, down or into the body (causing the rope to touch the body and stop)</li> </ul>

**Teaching Tips:**

- participant may remain stationary while swinging rope
- “walk” through the skill before trying it with a jump
- practice crossing and uncrossing
- practice keeping arms crossed for four turns before uncrossing
- create a pattern of crossing and uncrossing
- using a slightly longer rope will yield a bigger loop to jump through

Double Under	Technique	Common Errors
	<p>Always take off and land on two feet for this skill. The rope goes under the feet <u>twice</u> on each jump of the rope.</p> <p>Practice jumping higher than usual. Practice first without the rope. Next, use the rope to practice the higher jumps, but making it go under the feet only once on each jump.</p>	<ul style="list-style-type: none"> <li>-using arm actions instead of just wrists</li> <li>-not jumping high enough</li> </ul>

## Selected Drills

### 1. Walls – Agility/Coordination

The instructor names the four walls as appropriate (e.g., If one wall has mirrors, one is blue, one green and one is an open section with equipment, then name the four: mirror, equipment, blue, green).

Participants begin by jumping their rope in time with the music/clapping/counting. When the instructor calls out the name assigned to one of the walls, the participants travel toward that wall (continuing to face forward) so they are moving either forward, backward, to their right or to their left.

### 2. Box – Lateral Stability/Coordination

The instructor places four cones (or tape marks) to form a square, all approximately 15 feet apart.

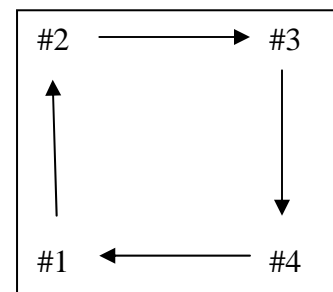
Participants forward from cone #1 to cone #2 using alternating step (or for beginners, two foot bounce).

When participant reaches cone #2, participant skips to cone #3, still facing forward, using alternating step lateral movement.

When participant reaches cone #3, participant skips moving backwards (still facing forward) using alternating step to cone #4.

Participant finishes drill moving from cone #4 to cone #1 using alternating step lateral movement facing forward.

To add difficulty – change direction of rope to backward for #2 - #3 and #3 - #4.



### 3. 10 up, 10 down – Speed and Power

Participants alternate between right and left feet, increasing the repetitions per foot until at 10 on each side. Then decrease back to 1 on each side.

(e.g., RL, RLL, RRLLL, RRRLLLL, RRRRLLLLL, etc )

To add difficulty, speed can be increased for each repetition increase.

### 4. Boxer Drill – Speed and Power

Participants perform 8 count combination (boxer right, boxer left, alt r/l/r/l)  
Music or clapping tempo increases.

To add difficulty, add side swings, crosses, movement and rope direction changes.

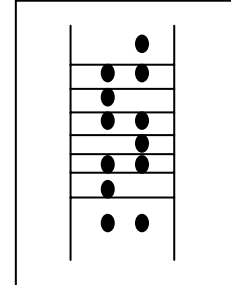
## 5. Double Under Challenge – Strength and Power

Participants start with double under on 8 count (eg. 7 two foot bounces or alternating step, then double under). Repeat 4x. Next, double under on 4 count. Repeat 4x. Next, double under on 2 count, repeat 4 x. 8 double unders. Repeat combo.

## 6. Drill: Ladder Hopscotch– Agility

Instead of using an actual agility ladder, mark out with tape hash marks a ladder on the ground – as long as required.

Participant starts with feet together for basic jump at bottom of ladder. Participant lands on left foot only on first rung of the ladder. Jump off on left foot, landing on two feet on next rung of the ladder. Jump off on two feet, land on right foot on next rung of the ladder. Continue until the end of the ladder in this pattern.



Most agility ladder drills can be adapted for use with a skipping rope.

## 7. 10 Minute Challenge

Goal: To skip for 10 minutes without stopping at 160 bpm.

For many, mini goals required to reach the goal of 10 minutes

- 15 seconds skipping, 1 minute marching intervals
- 30 seconds skipping, 15 seconds skipping, 30 seconds marching intervals, etc.
- For those for whom this is easy, try backwards skipping, crosses, etc.

### Modifications

- All skills for drills can be performed without a rope.
- As well, they can be performed with low impact. This allows for maximum participation in a PE setting.
- Participants may set a goal of gradually increasing time with impact/with rope to eventually perform all skills and drills with rope.

### Adding Difficulty

- Tempo changes
  - Constant (using faster music/counting/clapping) e.g. try agility ladder drills at faster and faster pace
  - Increasing and decreasing throughout drill
- Footwork changes (e.g., use grapevine in the box drill)
- Combining upper body and lower body skills
- Directional changes (e.g., do the agility ladder drill with rope backwards)

---

***Jump Rope for Fitness and Conditioning*** (DVD and book) will be available April 1<sup>st</sup> 2010 on [www.jumprope.com](http://www.jumprope.com) for under \$20! Contains 78 DVD clips of skills and drills.