

Speed skating



Speed skating is a highly technical sport. There are two types of speed skating; long track practiced on a 400m oval and short track, which is skated inside a hockey arena on an 111m track. Short track is the discipline used for SO competitions. Learning to skate on ice is a fun activity and it can be done on many different types of skates (hockey, figure skating and speed skates) allowing athletes to glide for a long time with just a few pushes. Speed skates have low friction blades allowing skaters to go faster and glide longer than hockey and figure skates.

SO athletes coming to speed skating have usually learned some basic skating skills. They can move straight forward but often lack the ability to make crossover strides, change directions and accelerate quickly; all of the essential elements to acquire speed in the sport of “speed” skating. As a result, SO competitions often have a majority of skaters trying to get some speed in the straightaway, but then glide around every turn. Unless a coach has good knowledge on how to acquire speed skating basic skills and recommend proper equipment, SO athletes are doomed to remain at the same level throughout their careers.

In-line skating (also known as rollerblading or its sister sport roller-skating) has been shown to be as efficient to learn basic speed skating skills as on-ice skate exercises. Because ice time is difficult to find, in-line skating in a gymnasium or outside is a great tool to develop new speed skaters. The 20-hour rule applies very well to speed skating using either in-line or on-ice training.

After learning to skate (moving on ice with skates), athletes are ready to learn basic speed skating techniques. Skills required are listed in the speed skating basic skill (coming up in a few pages). These sheets can be used as a guide, and when all skills are marked “yes”, basic technique is learned and athletes are ready for intermediate skills.


Guidelines for using the skill sheet for speed skating


1. Learning speed skating is a lot about balance and alignment. Athletes start with proper equipment check and must learn gliding and balancing on the straights first.

Changing Expectations in Special Olympics

2. When this is done (it can take more than 20 hours), athletes start turn skills including cross-overs.
3. Follow each step of the skill sheet (one at a time) until all basic skills are acquired. Progress will be directly related to the amount of focused practice time. Using roller skates is a sure way to acquire all speed skating basic skills.


Speed Skating Basic Skills
Done on ice or on in-line skates

Basic Skill: Basic Position (Straight)	YES	NO	Comments
Proper ankle supporting boot	<input type="checkbox"/>	<input type="checkbox"/>	
Correct 8m blade rocker And sharp blades	<input type="checkbox"/>	<input type="checkbox"/>	
Alignment (ankle-knee-hip) <i>Difficult skill</i>			
Ankle straight (gliding)	<input type="checkbox"/>	<input type="checkbox"/>	
Ankle straight (skating)	<input type="checkbox"/>	<input type="checkbox"/>	
Alignment ankle-knee-hip (Gliding)	<input type="checkbox"/>	<input type="checkbox"/>	
Alignment ankle-knee-hip (Skating)	<input type="checkbox"/>	<input type="checkbox"/>	
Knee angle 90-105 °	<input type="checkbox"/>	<input type="checkbox"/>	

Basic Skill: Turns	YES	NO	Comments
Sub Skills (<i>very difficult skills</i>)			
Alignment (ankle-knee-hip)			
Ankle straight (gliding)	<input type="checkbox"/>	<input type="checkbox"/>	
Ankle straight (skating)	<input type="checkbox"/>	<input type="checkbox"/>	
Alignment ankle-knee-hip (Gliding)	<input type="checkbox"/>	<input type="checkbox"/>	
Alignment ankle-knee-hip (Skating)	<input type="checkbox"/>	<input type="checkbox"/>	
Knee angle 90-105 °	<input type="checkbox"/>	<input type="checkbox"/>	

Changing Expectations in Special Olympics

2 skates glide turn
(Correct edges) 

Hockey circle 1/2 lap
On left skate (following line) 

And right skate (following line)

Cross-overs 
On circle line, landing with
Right skate on the line

**Skate 5 laps with crossovers
And correct straight position**

Skate 1 lap with crossovers
Women less than 15 sec.
Men less than 13 sec.

Basic Skill: Starts	YES	NO	Comments
Ankle straight	<input type="checkbox"/>	<input type="checkbox"/>	
Knee angle 90-100 °	<input type="checkbox"/>	<input type="checkbox"/>	
Weight distribution 50/50 (back to front)	<input type="checkbox"/>	<input type="checkbox"/>	
Back leg push	<input type="checkbox"/>	<input type="checkbox"/>	
Strong arm swing	<input type="checkbox"/>	<input type="checkbox"/>	
Quick first 3 steps	<input type="checkbox"/>	<input type="checkbox"/>	
Start 1/2 lap with crossovers Women less than 9 sec. Men less than 7.5 sec.	<input type="checkbox"/>	<input type="checkbox"/>	

**When athletes achieve all “YES”, they have acquired basic skills.
Expectations are critical to skill acquisition.**

Changing Expectations in Special Olympics

20-hour acquisition

Skill Breakdown: Examples of priority elements to focus on during practice

Spend time on each one until acquired

1. Skating forward: Balance – Ankle-knee-hip alignment – Arm motion –
Glide in straight line
2. Skating turns: Balance – Ankle alignment – Circle glide – Edges –
Crossovers
3. Start: Body position – Fast accelerations – 3 steps start –
Arm motion/position

Straight and crossover technique will take at least 20 hours to learn for each one, starts will take only one to five hours after the straight skills are acquired.



Home skill practice using IN-LINE skates:

Home practice is necessary because most SO programs don't have enough ice time to learn basic crossover technique. Joining a generic speed skating club is also another option.

Speed Skating Example: Focused Basic Skills Session on ice or on in-line (1 hour)

Practice only one skill at a time: Example "cross-overs"

(15' = 15 minutes)

15' Warm up and stretching (before skating)

5' Skating warm up

20' Cross-over (**with demonstrations and video, slow down demonstration when introducing a new skill, use hands to guide movements when necessary**)

- Holding boards, lean left on left leg keeping ankle straight (this is a stationary exercise)

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- Switch to right leg
- Repeat above with as much lean as possible
- Glide on 2 skates around corner using left edges
- Glide on left leg edge around corner this is on one skate (using a partner for balance)
- Same as above but switch leg

10' Aerobic training (5 intervals of 1 minute with 1 minute rest in between)

20' Crossover part 2

- Holding boards, lean on left edges on both skates and execute cross overs always landing on left edges
- Using circle hockey face off – Gliding on left for half lap – Switch to right
- Cross-over hold hand on the circle (leaning inside)
- Cross-over following the circle

Don't worry about the quality of crossovers, but make sure to remain on left corresponding edges and do as many as possible.

Conclusion:

Speed skating can be learned on in-line skates away from the arena ice. SO programs seldom use in-line to promote and learn basic speed skating (and skating) skills. Using the skill sheet is an excellent way to learn basic speed skating skills and encourage athletes to practice. Many skills can be practiced throughout the year on in-line skates and the more time spent on them with focused training, the better each SO athlete will become. 20-hour program with three practices of one hour per week will in most cases lead to crossover acquisition and all other speed skating basic skills.

Lesson Plan
Basic Skill Acquisition Program
(weekly or monthly)

Sport _____ Athlete Name: _____

Program Expectations

1- Weekly Practice (attend all practices)

Day (S) _____ Time _____

Location _____

“What the group is working on”:

2- Club Fit 100% attendance (Including Functional Testing exercises)

Day _____ Time _____

Location _____

“What you need to concentrate on”:

3- Basic Skill Development Homework (4 times per week - 1 hour per day)

Skill _____

“Individual Home Practice Objectives”