



# The Enhancement of Skating and Shooting Bio-mechanics

By Eric Calder

President – Skills Plus Hockey

# SKILLS PLUS HOCKEY



## Straight Line Forward Skating

- Full extension at the end of the push with plantar flexion
- 90 degree knee bend
- 50 degree upper body bend
- Relocate the push leg under the body by recovering skate past the body's midpoint
- The heel kick must relocate below parallel
- Drive the push leg wide away from the body

# Skills PLUS HOCKEY



## Tight Turn / Glide Turns

- Level shoulder through the turn – lower body angled to the middle and upper body angled away from the middle
- Wide Stance – outside leg extended and inside leg flexed
- Weight more on front leg and middle of skate blade
- Hold stick in stickhandling position – approximately one foot apart



# Forward Cross Overs

- Level shoulder and no hunching– lower body is angled to middle and upper body is angled away from the middle
- Quick fluid leg movement
- Extend in legs , ankles and toes
- Hold stick in stickhandling position (approximately one foot)

# SKILLS PLUS HOCKEY



## Backwards Straight Line Skating

- Low kneed bend , square and level shoulders
- Arms move front to back, not very large movements
- C-cut is in a shape of heart
- Right leg stride finishes at 2 o'clock and left leg stride at 10 o'clock
- Blades remain on the ice
- Full extension with plantar flexion
- Relocate the push leg under the body before alternate leg begins to push



## Stationary Wrist Shot

- Transfer body weight from the back leg to the front as the puck moves forward (thrusting the hips forward)
- Puck moves forward on a path with left and right arm close to the body into the load position
- Load Position – top hand is quite extended and well out in front away from chest, bottom hand is flexed and out in front as well (to a maximum), weight is now forward on the front leg in a low bent knee power position
- Follow through staying low in the power position with core and should rotation
- Whip the arms through quickly and extend arms and hands at target



# Stationary Slap Shot

- From the hockey position transfer body weight to the back leg as the puck remains stationary below your head
- Move the lower hand on the shaft of the stick to approximately the middle point
- Core, shoulders and arms rotate into the load position
- Load Position – top arm is straight at extension behind the back knee, lower hand is flexed to a maximum, chest out, square shoulders, most of your weight is on your back leg
- Unload quickly with a forward hip thrust towards the target staying low in a power position with core and shoulder rotation, top arm will collapse and bottom arm will begin to extend through impact, hit down just behind the puck to enhance stick flexing
- Follow through with your weight fully forward on front leg and arms and hands are extended arm at target
- Back leg remains low on the ice with toe pointing down into the ice (provides stability and balance)



# Principles for Teaching Hockey

1. Individual Skills
2. Individual Tactics
3. Team Tactics
4. Team Systems
5. Strategies