

This resource is intended to serve as a guide for coaches based on my 10+ years of experience combined with a focused literature review on motor learning, biomechanics, strength and conditioning, practice variables, feedback and cueing, optimizing practice environment, and motivational coaching. The goal of this guide is to bridge the gap between theory and practice to provide coaches with a practical tool.

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PART 1: SKATING SKILLS

OBJECTIVE - To provide a general understanding on fundamental skating skills, ways to increase and decrease the difficulty of these skills, and examples demonstrating optimal techniques

* These skating techniques can be developed further by compounding the skills and including them with other skills/drills. This section of the guide is meant to serve as the foundation to incorporate skating specific practice on a consistent basis for optimal skating skill development.

BALANCE & EDGES

Both balance and edges are two fundamental concepts that make up the cornerstones of skating success.

Achieving balance is the starting point of developing any skating skill. An understanding of edges allow the skater to intuit the body mechanics necessary to acquire the skill completely.

You can improve your athletes balance and edges by pushing them outside of their comfort zone using the following types of drills. The goal of edge work is to enable balance, and more importantly, to successfully transfer their force through their edges to the ice. Weight transfer from skate to skate (or within their skate) will improve an athlete's edges, therefore developing a more efficient and effective skater.

Edge Types

- * Inside Edge: Is the edge closest to the middle or medial side of the body
- * Outside Edge: Is the edge closest to outside or lateral side of the body
- * Flats: Is both your inside and outside edge (when you are on both edges)

Cueing Balance & Edges

Give your athletes external cues to focus on their early attempts of a technique:

- "Sit it in chair" (to encourage them to bend their knees)
- "Show me the logo on your jersey" (to encourage them to keep their chest up)

 Give them something to look at "keep your eyes on the scoreboard, flag, etc." (to encourage them to keep their head and eyes up)

These are useful cues to include in any drills for skills that require bending the knees and keeping the eyes and head up. If this approach does not result in the desired outcome, demonstrate the difference between what you're seeing and what you want. Ask them which example looks more stable, powerful, balanced, faster, etc. Afterward, if their technique still needs improvement, you can address direct body positions and give them individual kinaesthetic cues. I.e., Use your stick to direct the athletes on their stationary positioning or while they are skating. This gives them direct feedback to adjust their positioning and/or technique.

If the skater doesn't improve thru these steps, they may have a physical limitation or the skill is too complex for them. Don't force it. Instead, encourage them to keep working at it today and in future practices.

Below are some skating drills that can help improve a skaters balance and edges in their skates once they can successfully stand in their skates and balance independently on the ice.

For videos of the all the drills see **page 73** for the direct skating skills link on my website.

BALANCE DRILL COACHING CUES/ERRORS

Skating Drills	Coaching Cues	Common Errors
2 Foot Forwards Glide	Knees over toes, blades on flats, knees bent, head and chest up	Valgus knees (bending in), on inside edges, knees not bent enough, looking down
1 Foot Forwards Balance	Shift weight to line up chin-knee-toe on support leg, blade on flats, knee bent, head and chest up	Chin-knee-toe not aligned, blade on inside edge, standing straight, looking down
2 Foot Forwards Jump	Bend knees, jump up and land low on flats to absorb weight	Landing with straight legs, not low enough to jump, landing on inside/outside edges
1 Foot Forwards Jump	Bend knee, shift weight to support leg, jump up and land low on flats to absorb weight, chin-knee-toe aligned	Leaning too far forward and/or back, bending only from knees instead of loading into hip, loss of balance from misalignment of chin- knee-toe, looks down after jump (falls forward), leaning on stick.
Forwards Knee Touches	Shoulder must stay level like a shelf, head/chest up	Shoulder drops, looking down, spinning out of control
Forwards Knee Touches *ringette/ hockey stick up	Stick and shoulder stay level together, head/chest up	Stick is not level, looking down, spinning out of control

Skating Drills	Coaching Cues	Common Errors
2 Foot Backwards Glide	Sit back into hips, shoulders/chest slightly more back than forwards glide, on flats, knees bent, head up	Leaning too far forward, on inside/ outside edges, looking down
Backwards Knee Touches	Shoulder must stay level like a shelf, head/chest up	Shoulder drops, looking down, spinning out of control
Backwards Knee Touches *ringette/ hockey stick up	Stick and shoulder stay level together, head/chest up and slightly more back than forwards knee touches	Stick is not level, looking down, spinning out of control, leaning too far forward

EDGE DRILL COACHING CUES/ERRORS

Drills	Coaching Cues	Common Errors
Inside Edge Weight Transfer	Shift weight back and forth, use inside edge heels for power, keep skates wider than shoulder width, keep shoulders facing forward	Not using body weight to gain power, skates not wide enough, letting whole body turn
Inside Edge Sculling	Push skates out together, using inside edge heels for power, staying low (knees bent, head and chest up)	One foot pushing more than the other, skates cutting too wide (can't pull back under body), looking down, no power from the blades (not pushing from heels)
2 Foot Forwards Slalom	Skates slightly narrower than shoulder width, cutting on our edges like we're "skating down the ice", always on opposite edges (one foot inside, one foot outside), get power from heels, stay low	On both inside edges instead of opposite (inside & outside), lacking power (not pushing from heels), looking down, bobbing up and down (stay low)
Single Leg Forwards Inside Edge Hold	Hold inside edge on one foot while maintaining your balance on it, but letting it turn you slightly, keep shoulders level like a shelf, eyes and stick go in the direction you want to go	Looking down (causes the athlete to cut too hard on their edge = less balance and control), Leg that is in the air is not bent and controlled (keep the knees aligned), standing up (keep knee locked in a bent position

Drills	Coaching Cues	Common Errors
Single Leg Forwards Inside Edge Hold *Heel Pump	Hold inside edge on one foot for half of a circle, for the other half use your heel to generate power from the inside edge, use a controllable amount of pressure into the ice	Standing up out of low position, putting too much pressure into heel causing the athlete to lose balance
Single Leg Forwards Outside Edge Hold	Start with continually crossing the feet over (can step out if needed) slowly start holding this single leg stance while balancing on the outside edge in motion, stay in control but the player will turn and do a half circle, then switch. *progress to a full circle	Inside shoulder lower than outside shoulder, looking down, not bending the knee they are standing on, crossing over with a wide leg swing
Forwards Inside Edge Glove Touch	Holding a single leg inside edge while reaching down with the opposite hand to touch the ice	Touching down with the wrong glove, head down
Single Leg Backwards Inside Edge Cut	Start with making C- cuts, slowly pick up the inside skate cutting on the inside edge, finish with cut from mid-foot	Not balancing on one leg (must sit back into hip for best balance & control), stance too narrow (aim for shoulder width or wider)

Drills	Coaching Cues	Common Errors
Single Leg Backwards Outside Edge Cut	Start with crossing the feet over each other (can step out if needed), after the crossover the back foot must push from the ankle to dig the outside edge into the ice for power (pushing on the gas pedal)	Not getting low enough (will be difficult to crossover, will not be able to get on the outside edge), not extending the ankle, wide circles with skates when crossing over
Single Leg Backwards Outside Edge Scissor Cut	Crossing over as fast as possible, using "gas pedal" by cutting on outside edge	Too upright, not using outside edge to cut, can't control legs
Single Leg Forwards Slalom	Maintain motion by cutting on inside and outside edges on a single leg, cut from the heels by pushing skates into ice to generate force. Leg in the air must stay in front of the body and swings out (inside edge) and across the body to help with the cut (outside edge)	Leg in the air ends up behind body (must stay in front and to the side to help with forwards momentum), not pushing from heels (can't generate force)
Single Leg Backwards Slalom	Leg in the air must stay behind, swing it from side to side along with cutting from the inside to outside edge from the mid-foot	Leaning too far forward (losing balance, leaning on stick, falling forward), not generating enough force down into ice

FORWARD STRIDE

After an athlete starts to gain balance and get more comfortable in their skates, the next step is to work on their forward stride. Skating is a lot different than walking or running, and a different movement pattern must be established to learn how to move faster on the ice.

Stride Phases

The forward stride is comprised of 3 phases: stride/ push, glide, and recovery. Each of these phases can be broken down further into specific elements:

1) The stride/push begins with a push into the ice, the hip must rotate externally while the inside edge of the skate pushes down and out. The hip and knee must start in a bent position and then extend behind and slightly to the side of the athlete (at about a 45 degree angle). To maximize the power in their stride, the athlete must finish by flicking their ankle (like pushing on the gas pedal).

2) The glide phase takes place on the support leg during the push and recovery of the stride leg. During the glide phase the skate should be positioned on the flats of the blade.

3) The recovery follows the push, on the same leg used in the push phase. Generally speaking you would want to recover on your flats, directly under the same side shoulder, with the toes facing forward.

Establishing this mechanic and developing the stride movement pattern is very important with beginner skaters

as they grow and develop their skating skills. It is also important to reestablish after an athlete has had a growth spurt. However, as athletes grow and develop, different body characteristics will influence their forward stride. These are uncontrollable factors and will heavily influence an individual's forward stride.

For example, when an athlete has a greater upper to lower leg ratio, they will not be able to have as deep of a knee bend as an athlete that has a lesser upper to lower leg ratio.

Another example is when an athlete has a very wide stride and does not recover under the shoulders. If they are able to generate a lot of power in these positions, then it is a non-issue. The key things to look for is if the athlete is able to sustain this stride (I.e stride efficiency) and if it is enough to meet the demand of their sport/position.

Stride Direction

When pushing off you want the athlete to maintain contact along the full length of their inside edge for as long as possible. This will be achieved by ensuring that the angle of their stride is between 35-45 degrees backward.



FORWARD STRIDE COACHING CUES/ERRORS

Drills	Coaching Cues	Common Errors
Stationary Forwards Stride	Starting position: blades on flats, head/ chest up, slight forward lean, knees bent Striding position: Support leg on flats, push back at a 45 degree angle with the whole blade on the inside edge, finishing with the front 1/3 of the blade, full extension happens at the hip, knee and ankle joint, finishing the stride with the toe/ ankle flick	Direction is not at 45 degrees (most likely pushing backwards too much) cue to grab more ice and push more to the side, stance leg is on inside edge, not bending knees enough, too upright or looking down
2 Foot Forwards Glide	Knees aligned over toes (blades on flats), slight forward lean, head/chest up, sitting low	On inside edges, head/chest down, too upright (no slight lean forward), standing up too much
1 Foot Forwards Balance	Transfer weight to stance leg, line up chin-knee-toe while sitting low, head/chest up	No weight transfer, chin-knee-toe not aligned before picking foot up, looking down, not bending the knee enough

Drills	Coaching Cues	Common Errors
Forwards Stride (right or left leg only)	Support leg on flats, head/chest up, slight lean forward, stride leg pushing with full triple extension finishing with a toe flick, stride leg recovers under shoulder, straight path	Support leg on inside edge, recovery is wider than shoulder width, lack of extension in hip or knee, does not finish stride with ankle extension (toe flick), not low enough, looking down, skating path drifts one way (work on having a more stable support leg)
Forwards Stride Alternating with Pause	Forward stride mechanics alternating between left and right pushes, add pause between strides	Improper recovery, body positioning, and/ or stride, not pausing, side to side movement versus a straight path
Forwards Stride Alternating	Forward stride mechanics alternating between left and right pushes	Improper recovery, body positioning, and/ or stride, side to side movement versus a straight path

BACKWARD STRIDE

The backward stride is when a player uses a push or cut to move in a backward direction. There are different techniques that can be useful depending on the goal of the task or the game situation. This skill has a place for all players. However, it is imperative for a defensive player to have this ability and continually build upon it.

Once the athlete is comfortable and has balance moving forwards, you can start to work on backward skating techniques. The first step is to to develop their balance and edges while moving backwards. A good starting point is taking backward steps or pushing off the boards and gliding. Once they have this basic ability, you can teach them how to shift their weight back and forth, using their inside edges to move backwards. Finally, you can start to teach them stride techniques to get them moving backwards faster and more efficiently.

The two primary backward stride techniques are the *C*-*Cut Technique* and the *Half-Heart Technique*. They are both fundamental skills to maintain backward skating speed.

The C-Cut Technique

This technique is when an athlete makes a c-shape cut using their inside edge. They lead the push out with the heel and finish with the toe, returning back to a shoulder width position. This technique is most effective when a player wants lateral or side to side movement while skating backwards. It is a great way to maintain your speed while staying on the goal side of an offensive player.



The Half-Heart Technique

For a half-heart the athlete pushes up on inside edge by turning the toe in. Next they cut back by leading with the heel and finishing with the toe, returning back to a shoulder width position. This technique is most effective when a player wants a powerful backwards stride in a linear or straight back direction. It is a great way to maintain your speed moving in a backward direction.



Back Defensive Skating

Back defensive skating is an advanced technique where the athlete uses crossovers while skating backwards. Backward crossovers are the go-to tool when an athlete needs to change their lateral direction (move side to side) fast. They are also essential when an athlete needs to accelerate and gain speed while skating backwards.

Backward Crossover Start

This technique is essential when an athlete must begin skating backwards from a stationary position or accelerating out of a transition from forwards to backwards. It is crucial that an athlete utilizes the outside edge when cutting under to accelerate as fast as possible from either of these positions. To make this technique more efficient, the athlete must use the crosscut to turn their body to face in the direction of the play/opposing player.

BACKWARD STRIDE COACHING CUES/ERRORS

Drills	Coaching Cues	Common Errors
Push off Boards and Glide Backwards	Blades on flats, knees bent, head and chest up	Leaning too far forward, on inside edges
2 Foot Backwards Glide	Blades on flats, knees bent, head and chest up	Leaning too far forward, on inside edges
Stationary Backwards Toe Push	Turn the toe in, push up on inside edge, flick toe, can add pause with toe pointed (push and lift skate off ice)	C-cutting instead of pushing up, keeping skate on the ice, not finishing with toe
Single Leg Backwards Stride	Support leg on flats, stride leg pushes up and out (half-heart shape)	Bobbing up and down, any side to side movement
Backwards Alternating Stride with Pause	Support leg on flats, stride leg pushes up and out (half-heart shape), alternating with pausing in recovery position (both skates under shoulders)	Not pausing (rushing through), any side to side movement, bobbing up and down
Backwards Alternating Stride	Backwards skating mechanics (with half- heart shape cut)	Not pushing up first before cutting, any side to side movement, bobbing up and down

Drills	Coaching Cues	Common Errors
Single Leg Backwards Outside Edge Cut	Start with crossing the feet over each other (can step out if needed), after the crossover the back foot must push from the ankle to dig the outside edge into the ice for power (pushing on the gas pedal)	Not getting low enough (will be difficult to crossover, edge will not be able to get not the outside edge), not extending the ankle, wide circles with skates when crossing over
Backwards Stride (half-heart)	Backward skating mechanics moving straight back (linear), goal is to move at top speed	Side to side movement, no half heart push and cut, wide recovery
Back Defensive (Backwards Skating with Crossovers)	Crossover - outside edge cut - step out sequence, head/chest up	Not pushing enough with outside edge, not crossing all the way over, looking down
Single Leg Backwards Inside Edge Cut	Start with making C- cuts, slowly pick up the inside skate cutting on the inside edge, finish with cut from mid-foot	Not balancing on one leg (must sit back into hip for best balance & control), stance too narrow (aim for shoulder width or wider)

FORWARD CROSSOVERS

Forward crossovers are a vital skill in which the skater is moving in a forward direction and crosses one skate over the other. They are useful for gaining speed on slight changes of direction. They allow a skater to accelerate from a gliding or stationary position. This is a simple skill that builds into more complex maneuvers. Forward crossovers will ultimately increase your speed and agility on the ice.

Utilizing BOTH Pushes in the Crossover

In a forward crossover there are two pushes. The first push is on the inside edge from the outside skate (if you were going around a circle). After this push, this outside skate crosses all the way over the inside skate. As this happens the inside skate crosses under (*cross-under push*) and pushes initially with the length of the blade on the outside edge, eventually finishing with the flick of the toe on the outside edge (*gas pedal*). After the second push the skates reset under the shoulders to do another crossover.

Utilizing both the inside edge from push one and the outside edge from push two and exerting power down and into the ice will ultimately lead to being a faster and more efficient skater.

FORWARD CROSSOVER COACHING CUES/ERRORS

Drills	Coaching Cues	Common Errors
Step Overs	Keep toes facing forward and hips square, stay low, cross foot all the way over, have skate that is being crossed over transition from flats to outside edge	Toes turning in direction they are going, standing too upright, not getting onto outside edge
Step Over with Jump	Cross over and jump off of foot you step down after crossover, jump for distance	Jumping up, hips/toes turning
Forward Crossovers with Inside Edge Balance	Shoulders level, head/ chest up, knee bent, stay controlled, on outside skate (inside edge)	Cutting on edge, inside shoulder leaning in, on wrong foot (inside skate- outside edge)
Forward Crossovers with Outside Edge Balance	Shoulders level, head/ chest up, knee bent, stay controlled, on inside skate (outside edge)	Cutting on edge, inside shoulder leaning in, on wrong foot (outside skate- inside edge)
Forward Crossovers with 1st Push Focus	Have the outside skate push towards the outside of the circle, aim for creating width (no crossovers here)	Outside skate pushing back instead of out, skates crossing over, looking down

Drills	Coaching Cues	Common Errors
Forward Crossovers with 2nd Push Focus	Have the inside skate push towards the outside of the circle *cross-under push*, this skate pushes from the outside edge with a full blade until it completes the cross under, then you finish with the toe flick	Pushing to the inside of the circle (on the inside edge), heel lifting up before it crosses under
Forward Crossovers (around circle)	Utilize both pushes of the crossover, shoulders level	Inside shoulder leaning in, not utilizing 2nd push *cross-under push*
Forward Crossovers with Sticks Up	Complete forward crossovers but with the sticks up, keep the stick level with the ice	Stick is leaning in
Forward Crossovers (around zone)	Only use crossovers when you have to turn, protect ring to outside of circle	Not protecting ring

BACKWARD CROSSOVERS

Backward crossovers are a skill in which the skater is moving in a backward direction and crosses one skate over the other. They increase your speed when you need to accelerate quickly, skating backwards. They can also be useful for slight changes in direction when skating backwards down the ice. This is a more complex skill that should be introduced after a skater is comfortable skating backwards.

Utilizing your Pushes Based on the Task

There are two pushes in the backward crossover. How you utilize them is dependent on what technique is required to match the desired outcome. The first push (coming from the inside edge) will initiate lateral movement. The second push (from the outside edge or the cross-under push) will drive the athlete backwards. By changing the power applied in each push, you can better control your direction and speed of travel. To increase your lateral movement, adjust the length of your stride during the second push (on the outside edge).

BACKWARD CROSSOVER COACHING CUES/ERRORS

Drills	Coaching Cues	Common Errors
Backward Crossovers with Inside Edge Hold	Balancing on the inside edge (outside skate), shoulders level, free leg is bent beside other leg	Not shifting weight and unable to balance, shoulders are not level
Backward Crossovers with Outside Edge Hold	Balancing on the outside edge (inside skate), shoulders level, free leg is bent beside other leg	Not shifting weight and unable to balance, shoulders are not level
Backward Crossovers with 1st Push Focus	Pushing with outside skate (inside edge) to outside of circle	Crossing over, pushing back instead of out to the side
Backward Crossovers with 2nd Push Focus	Pushing with inside skate (outside edge) to outside of circle *cross under push*	Heel coming up too early, not grabbing the ice with the outside edge
Backward Crossovers	Utilize both pushes while crossing outside foot over inside, can look over shoulder, shoulders stay level	Appear to be slipping on the ice, not gripping with edges, leaning into the circle
Backward Crossovers with Sticks Up	Sticks up and level with ice	Stick un-level
Back Defensive (Backward Skating with Crossovers)	Crossover - outside edge cut - step out sequence, head/chest up	Not pushing enough with outside edge, not crossing all the way over, looking down

TRANSITIONS

Transitions are the ability to change direction (forwards to backwards OR backwards to forwards). Having this ability creates a more agile athlete. An athlete that can transition any direction at any moment, can modify their body position the fastest to have success in the task they are executing on the ice.

Types of Transitions

* *Forwards to Backwards (Heels First):* Useful in switching directions fast on a sharp angle as it is one fluent movement from forwards to backwards.

* The "go-to" technique when having to quickly transition to backwards staying with a player breaking up the ice.

* *Forwards to Backwards (Toes First):* Useful in transitioning when skating in the same direction

* Example: Skating up the boards, transitioning to protect the ring and escape a player.

* Backwards to Forwards (Step out): The first step in learning how to transition from backwards to forwards. Using the inside edge the athlete cuts hard and then steps with the opposite foot in the direction they want to go.

* Backwards to Forwards (Cross and Step out): Once an athlete is able to do the step out technique, you can add a crossover before the step out to increase the speed into the transition and carry that momentum forward in the direction the athlete wants to go.

TRANSITION COACHING CUES/ERRORS

Drills	Coaching Cues	Common Errors
Linear Transitions: Forwards to Backwards	Turn upper body first, then hips while on the flats of the blades	Stopping/slowing down
Linear Transitions: Backwards to Forwards	Open hips, stepping out and in forwards direction	Slowing down, not stepping out first and tripping over feet
Forwards to Backwards	Turn heels first and cut back on outside skate to square up	Stopping/slowing down
Forwards to Backwards with a Crossover	Turn heels first, and transfer weight to inside skate crossing the outside skate over, use this crossover to square up	Transitioning with a narrow stance (can't grab ice for crossover), stopping/ slowing down (too much weight on out side skate)
Backwards to Forwards	Step out in direction you want to go	Not opening hips enough to step out
Backwards to Forwards with a Crossover	Backwards crossover then step out and in direction you want to go	Not creating enough width with the crossover (narrow stance)
Double Bracket	Turn heels first (Forwards to backwards) - crossover - step out (backwards to forwards)	Forgetting the crossover, not turning tight enough
Transition Hip Swivel	2 transitions in a row: Heels to the boards, toes to the boards, heels to the boards	Not turning on the flats

Drills	Coaching Cues	Common Errors
Transitions with Ring Protection	Always transition keeping the ring to the outside	Not protecting the ring, turning towards the inside
Middle Cut with Escape Turn	Skate up the boards, turn backwards towards the boards, crossover and step out to switch back to forwards	Turning wrong direction, stopping/ slowing down
Middle Cut with Escape Turn & Pass	Same but add support pass (as you turn) or pass up ice (as you transition back to forwards and get to open ice)	Not passing quick enough

STOPPING

Stopping is how a skater stops while moving on the ice, usually to avoid a collision or change direction. Having the ability to stop helps a skater feel more comfortable on the ice and motivates them in other areas, as they feel more in control. There are progressions of stopping that can be taught to help improve a skaters agility.

Dissociation

Dissociation is the ability to separate the upper body from the lower body. This is an essential skill for learning how to stop or improving an athletes stopping ability. When we are stopping we must turn from the upper body first, and then have the lower body follow.

What Edges Do You Stop On?

Both! When you are stopping you are on both your inside and outside edge. When you see someone stuttering along on the ice, falling over their blades, or having the blades get caught in the ice, they are trying to stop on either the inside or outside edge. In order to successfully stop, the athlete must turn their skates together while remaining on the flats.

Guidelines for Teaching Someone to Stop

Practice dissociation (turning from upper body and have lower body follow) while the athlete is on their flats
If the athlete is not on their flats, they will not spin
Get the athlete comfortable turning and stopping in BOTH directions from the beginning

* Ensure the athlete initiates the lower body movement by turning from their hips to allow both skates to turn together

* The athlete must bend their knees and sit into their hips to absorb the force of stopping

* Start slow, progress speed over time

STOPPING COACHING CUES/ERRORS

Drills	Coaching Cues	Common Errors
Snow Plow Stop	Push both feet out (toes in, heels out) stopping on flats (making a pizza slice shape)	Not pushing out enough or completing the stop
Lateral Stop (1 foot push out)	Push one foot out (toe in, heel out) stopping on flats	Not pushing out enough or completing the stop
2 Foot Stop (both directions)	Turn upper body, follow with lower body, stopping on flats	Trying to turn feet first, not coming to a complete stop, favouring one side
2 Foot Stop (Stay Low)	Stopping at a pre- determined spot (lines) staying low the whole time. Turn upper body first, then lower body	Popping up when they start again, not bending knees throughout
1 Foot Stop (Outside Skate)	Starting slow, balance on one foot with a bent knee and turn from the upper body following with the lower body, keep the free leg locked beside the gliding leg	Trying to turn the foot first
Partner T-Stop	Partner slowly pulling while supporting athlete attempting t- stop (stopping on one foot - inside skate) have them getting used to being on flats and gently scraping the ice	Partner pulls too push, athlete catches either inside or outside edge, leg is too straight

Drills	Coaching Cues	Common Errors
T-Stop	Position skates in a T back foot making the top, front foot gliding and making the bottom, gently push and stop on the back foot getting used to scraping on flats	Catching an inside or outside edge
1 Foot Stop (Inside Skate) with Crossover	Turn upper body, follow with lower body, stopping on 1 foot (on flats) followed by a crossover to got the opposite direction	Catching an inside or outside edge
1 Foot Stop (Inside Skate)	Slow and controlled, do a couple pushes then glide on one foot, turn upper body and follow with lower body stopping on inside skate	Catching an inside or outside edge, standing up on skate, not turning upper body first, unable to stay on flat of blade



Quick starts are when an athlete accelerates from either a stationary or gliding position. To utilize this skill most effectively skaters need to have a fast stride and recovery rate. The better a skater becomes, the faster they will be able to get to top speed and accelerate faster from a change of direction.

Key Points

- 1. Stride direction: direction of force should be more backward than regular stride location
- 2. Utilize the front 1/3 of the inside edge
- 3. Heels must turn inward, but not touch
- 4. Emphasize fast knee drive
- 5. Stride rate should be as fast as possible



QUICK START COACHING CUES/ERRORS

Drills	Coaching Cues	Common Errors
Board Falls	Heels in, front 1/3 inside edge pressing into ice (blades should feel stuck in ice)	Heels touching, heels not in enough, full blade is on ice
Board Falls with Knee Drive	Heels in, drive one knee up, keep blade engaged in ice	Blade slips (hips are not both pointing towards the boards)
Board Falls with Knee Drive Switch	Heels in, drive one knee up, followed buy a jump onto the other skate driving the other knee	Blade slips, full blade contacts the ice, back hip turns out
Stationary Quick Start with Jump Over Stick	Heels in, drive skate up and over stick, front 1/3 should be sticking in ice, push more back than in the forward stride	Full blade contacts ice, jumping for height not distance (not getting over the stick)
Stationary Quick Start	First 3-5 strides are on front 1/3 of inside edge on blades, knees are driving fast, stride speed is as fast as possible pushing more back than regular forward stride	Full blade contacts ice, back hip slips, running on toes (fall forward), knees aren't driving through
In Motion Quick Start	From a gliding position beginning quick start strides and blade engagement	Stride speed/location doesn't change, full blade contacts ice

Drills	Coaching Cues	Common Errors
Crossover Start	Pushing from inside skate using a flat blade to a toe flick on outside edge, can progress into quick start blade engagement (crossover and step onto front 1/3 blade)	Jumping up instead of for distance, not engaging edges on jump
Crossover Stops & Starts	Turn upper body first to direction you want to go, lower body follows with the stop, quickly drive out of this position	Not turning upper body first, slow coming out of stop
Backwards Crossover Start	From a wide position pull ice under you using a crossover to square up	No crossover, too narrow of a stance
LATERAL MOVEMENT & HIP Mobility

Lateral movement on skates is essentially the ability to move side to side (outside of our regular linear movement). A critical component to lateral movement is having adequate hip mobility. Lateral movement develops an athletes range of movement in all planes of motion, refining their ability to change direction.

Why is this important in ringette?

- * Strategies that employ lateral movement have been around for ages in hockey and are now starting to appear in ringette.
- * These strategies can be useful for a cycling, offensive player giving them more options and improves their ability to drive the net or make a play.
- * Skillful use of lateral movement techniques build upon a players games strategies, allowing them better abilities in evading the opposition.
- Defensively, being able to move laterally will increase a player's ability to move in the triangle, and help them create time and space to get the ring out of the zone.

Potential Limitations

When you are coaching lateral movement, you may come across athletes that are unable to comfortably get into positions where they can effectively move laterally.

- ★ Lacking sufficient hip mobility? → Address this issue off the ice with mobility and flexibility drills.
- ★ Not comfortable enough on inside edges to hold this position? → Decrease the speed, work helping the athlete get comfortable with fundamental drills so they can be successful and don't give up.

LATERAL MOVEMENT COACHING TIPS/IDEAS

Drills	Coaching Cues	Common Errors
Inside Edge Power Push	From a low position on one skate (inside edge) while slightly cutting, push with a full extension while driving the opposite knee as fast as possible and landing on that skate	Not having a full extension with the push, not driving the knee as you push (late knee drive)
Power Push with Crossover	After a crossover - from the skate you step onto, fully extend with a push while stepping and driving opposite leg/knee	Crossing the foot over - planting the outside skate - then pushing (wrong skate, must push with first skate you step onto during crossover)
Forwards Lateral Crossovers	Maintain top speed while weaving down the ice, use crossovers for lateral motion while staying low	Popping up during crossovers, slowing down/stopping when changing direction, not engaging edges
Forwards Lateral Crossovers with a Ring	Add ring protection (to outside)	Not using body to shield the ring
Forwards Lateral Crossover (Mirror Partner)	Follow partner up the ice while they are randomly changing their path using forwards lateral crossovers *stay in their tracks*	Not maintaining good gap control (want to be about 1 stick length away from the player)

Drills	Coaching Cues	Common Errors
Backwards Lateral Crossovers	Maintain top speed while weaving down the ice, use crossovers for lateral motion while staying low	Popping up during crossovers, slowing down/stopping when changing direction, not engaging edges
Backwards Lateral Crossovers with a Ring	Add ring protection (to outside)	Not using body to shield the ring
Backwards Lateral Crossovers (Mirror Partner)	Follow partner down ice while skating backwards *must stay goal side - inside	Not maintaining good gap control (want to be about 1 stick length away from the player)
Inside Edge Hold with Hip Open	Hold a single leg inside edge while the back hip opens in the air	Shifting from inside edge to flat (causes the skate to turn backwards)
Alternating Spread Eagle	Holding double inside edge with open hips, alternating sides each attempt	Not shifting weight to back skate, front skate shifting from inside edge to flat and turns backward
Hip Openers	Front skate glides, back skate pushes. When pushing back and behind the body, ensure the upper body opens with this movement.	Not opening with the upper body (looks like they are "riding a skateboard"), front skate shifts from inside edge to flat and turns backward
Spread Eagle Around Circle	Open hips and shift weight back and forth pushing on the inside edges	All weight on front skate (no weight transfer), front skate turning.

PART 2 : PRACTICE DESIGN

OBJECTIVE - To illustrate how to optimally incorporate skating specific drills into practice design.

* This guide is focussed on developing skating skills for ice sports such as ringette and hockey. It is designed to teach coaches how to implement technical skating development skills in both their day to day practice environment and while making their monthly / seasonal / yearly plan.



Part 2 - Practice Design

This chapter of the guide provides direction to coaches on how to plan a practice for optimal skill development and transfer to performance.

Extensive research on the topic of motor learning and control gives coaches valuable information we can use in our practices to better serve our athletes. This aids in how to teach these skills and helps coaches understand the best approach to transfer to game performance. Which is the ultimate end goal as a coach.

While research suggests using certain techniques over others, coaches must always consider the context of their environment. This is applied through thinking what is practical, and most applicable to your athletes.

You should consider:

- Age of the athletes
- The skill level/experience of the athletes
- How motivated your athletes are
- Is the athlete being challenged enough?
- Is the athlete being challenged too much?

DISTRIBUTED VS MASSED PRACTICE

Distributed practice, in the coaching world, can be defined as the method of breaking up your time spent practicing a skill into smaller chunks over a period of time. This could mean throughout an individual practice session or between multiple practice sessions.

On the contrary, **massed practice** means dedicating a larger chunk of time to practicing a skill in one session or over multiple practices.

Do you ever spend practice time trying to master a skill, see the athletes get it and perform it well, but then see them regress and repeat those same bad habits in a game or in the next practice session?

If so, you should consider altering your practices to utilize a distributed practice model.

- * What is it? Frequently alternating between skills (-10 min), versus working on one skill for the first half the practice and another for the last half.
 - Time spent on each skill = Same
 - Repetition of each skill = Same
- **Why?** Greater retention of the skills

practiced which transfers better to game-play.

- **How does it work?** Allows athletes time to process skills and then challenges them to recall those skills
 - This demand better replicates how they will access these skills in performance

Distributed Practice = Improved Retention

The key difference is that in *distributed practice* there are breaks away from the particular skill you are working on (by playing a game, or running a different skill/drill), and later you return to the first skill.

Distributed practice demonstrates clear benefits over the long term. First, the athlete experiences higher engagement during practice, as they regularly switch tasks. Secondly, time away from each exercise allows the athlete's brain to process the skill int he background. Finally returning to the skill challenges them to recall their mechanics, reinforcing brain pathways and improving skill retention. Ultimately the athlete is more likely to retain the skills that they have just learned, and access them again in the future (I.e. during a game).

Using this method, you will notice that you will see **less** immediate results, following an individual practice session, than if you were to utilize the *massed practice* method. While it may seem like the athletes are not learning, they are (it just takes time). Over the course of a number of practices, not only will they learn these skills, but both retention and performance will show marked improvement over similar athletes who have practiced using the *massed practice* method during the same period of time.

Distributed practice is recommended for use from beginner through to expert. All athletes whether they are beginner or elite, will be more engaged by switching the drills and skills more often.

PRACTICE VARIABLES

Practice variables are factors that make up all aspects of a drill and practice session. Some examples of this would be the number of players in a drill, the number of attackers, using cones versus active players, responding to a stimulus (whistle or opponent), or doing the drill with versus without a puck/ring, etc. Essentially practice variables make up the specific details in how to run drills or structure the practice.

Generally speaking, random is superior to blocked, and variable is superior to constant in regards to skill retention and transfer. When looking at skill acquisition, blocked or content methods may be beneficial for the athlete to first grasp the basics of the skill. Part-Skill teaching methods are a great way to break down a complex skill and improve parts of a skill. Whole-skill method is more appropriate once athletes have the capability to perform each individual part of the skill. Athletes must be challenged appropriately, just outside of their comfort zone. Pushing too much can lead to giving up. Not enough can lead to boredom. Once athletes are comfortable performing a skill, it is time to challenge them by increasing the task difficulty.

How to Think About Practice Variables

- * Examples: add opponents or additional skills, introduce a reactionary component or decision
- Consider the age and skill level of the athlete. Start simple and move towards more complex.
- * Never expect perfection on the first attempt. Skills are learnt through exploration, positive feedback, and

outcomes. Too much direction and explanation can be more detrimental to success in the skill.

Blocked Practice Design

Repeating the same skill consecutively, only working on one skill at a time.

Example: Focusing on forwards stride for one practice (dedicating 30 minutes) then focusing on stopping for the remainder (dedicating another 30 minutes). This usually equates to working on 1 or 2 skills in the practice.

Random Practice Design

Introducing variation and randomization when working on skills. This may include multiple skills or variations of the same skill.

An example of working on multiple skills would be working on forwards stride, backwards skating, and stopping for 10 minutes repeated by working on the same three skills in a different order for another 10 minutes each.

Adding practice variables to one skill could mean introducing task, environment, and/or individual constraints. For example, forcing athletes to stop in a specific direction, responding to a stimulus, adding an opponent, making the space smaller, increasing the speed, etc.

Random practice can, and should, be incorporated to some degree at every age or skill level. The most accessible way you can incorporate random practice methods is through tagging games, small-sided games, or gamesituation drills. Random practice will allow you to assess the level of transfer from the technical skills you are working on to tactical situations.

Variable Practice Design

Practicing a skill but using a different method or strategy each attempt with the same goal.

An example of this would be shooting from different locations on the ice to score a goal in a drill. This practice design is very important for improving motor pattern variability. When coaches use this practice design players learn how to regulate their passing and shooting strength, accuracy to best suit each different task compared to drills with a constant practice design.

Constant Practice Design

As the name implies, constant practice design means maintaining a continuous exercise throughout practice using one method to achieve one goal. Due to the high degree of variability in ringette and hockey, this method has limited value for us.

An example of this practice design would be a drill of consecutively shooting from the same location to score a goal. Exact shooting situations are rarely replicated on the ice due to external factors, such as opposing players and goalie. Situations like one-timers and offensive free-pass shots are more common and have less variability, but external factors are still present. These skills could be developed through constant practice with the aim to gain confidence in these situations. But, this should be followed up with a variable practice for best transfer to game play.

Whole Practice vs Part Practice

Whole practice is a method in which all parts of a skill are practiced in the natural sequential order. Part practice is when the skill is broken down into multiple parts with a singular focus on one part. Using part practice is a great way to break down more complex skills and have athletes experience success. However, these part skills must be progressed to the whole skill at some point so the athlete can properly discover how to sequence the skills and achieve the desired outcome from the whole skill.

Open vs Closed Environment

A closed environment means that it is a predicable environment. The athlete does not have to make any decisions, they just have a task to complete. There is little to no variability in this task as it is set before they complete the skill and remains constant as they complete the drill. On the contrary, an open environment provides a less predictable environment, with variability and decision making factors. An open environment best replicates the demands of a game. Skills should be progressed from a closed to open environment for best transfer to game performance. This can be achieved by adding decision making within a drill, pressure from an opposing player, and/or having the athlete choose the most appropriate skill to achieve a desired goal.

Skill acquisition is generally a long term process with little improvements each session.

True progress is created through continuous practice over a series of practice sessions.

SKILL TRANSFER TO PERFORMANCE

The skill learning process must undergo three phases: *acquisition, retention, transfer* to become engrained in the brain:

Acquisition is acquiring a skill and being able to replicate it on consecutive attempts.

Retention is the brain's ability to re-access that previously learnt skill, after a period of time, and complete is successfully again.

Transfer is the brain and body's ability to perform that learnt skill in a performance or open environment.

Each step is crucial in truly acquiring and being able to apply a skill under pressure. As skills are transferred to performance, a fine tuning effect happens through the outcome the skill produces in a game. When an athlete performs a skill and it produces an favourable outcome, they are likely to reinforce that habit and perform that skill again. On the contrary, if an athlete performs a skill that results in an unfavourable outcome, they are likely not to do this skill again. This is a direct feedback mechanism that athletes use to regulate their performance and fine tune their motor programs. Advanced athletes will be well aware of their mistakes and the negative consequences it created (creating a turnover, goal scoring opportunity, etc).

For this reason, games and pressure scenarios are one of the best ways to develop decision making skills and truly test if transfer has occurred. Reminding the athletes of the skills they worked on in practice and giving specific examples during a game is a beneficial way to help the athlete transfer those conscious skills to their gameplay.

PRACTICE PLANNING

Practice makes perfect, but should practice look perfect?

Having multiple skills to work on in a practice session has advantages over just working on one. In-depth practices focusing on one or two skills may seem like the best way to have our athletes master a skill. You will see marked improvements in your athletes when you only focus on one skill. However, true skill acquisition, where each skill is seamlessly integrated into game play, happens through refining skills over multiple sessions. When skills can be seen and replicated in game play is when retention and transfer has occurred.

What is Periodization?

The term periodization means to divide activities into smaller chunks and repeating them regularly over time. Periodization is typically used with the goal of creating adaptations that develop specific areas of performance for athlete. Designing for periodization based on the needs of your athletes is imperative to your success as a coach. Typically coaches plan a season by creating a Yearly Training Plan (YTP) or Annual Training Plan (ATP) for tactical skills, however more attention should be given to break down the technical skills of skaters throughout a season.

Periodization Principles:

- * Simple to Complex
- * Part skills to Whole skills
- * Blocked to Random

These principles can be applied in an individual practice session as well as over a period of time. The overarching goal is incremental progress and challenging your athletes.

The Skill Continuum

A simple way to visualize practice variables and understand the complexity of them is to refer to *figure 1 on pg*. 53.

This model provides an outline of the different practice variables a coach can utilize and a general idea of how to break down a practice for the skill level of the athlete. The variables are listed on a scale from simple to complex. Any skill in ringette and hockey can be put on this continuum. A skill begins on the left side of the continuum and progresses to the right side as their competency grows. The percentage of practice time dedicated to these different points on the continuum depends on the skill level of the athlete. However, every athlete should experience the whole continuum in some way for best transfer to performance.

Beginner level athlete example: a large percentage of practice time should use a closed environment and constant practice methods (repetitions doing a skill), however more complex skills can also be developed through part-skill teaching. You can give athletes a break from a skill, then come back to it later using distributed practice. Open and random environments can be created through battle drills or a game. However, as a coach you have to set lower expectations when working on more complex skills or implementing skills into a game. Give beginner athletes only 1-2 things to focus on with these more difficult drills so that they will experience success and feel confident to continue working on these skills.

- Novice to Advanced athlete example: In this range you need them to practice and master the basics, but they will need to perform these basics in different situations on the ice. Variable practice is a great way to make simple skills more challenging while expanding an athletes motor abilities (I.e. make that wrist shot from the outside of the triangle versus an offensive free pass). Again for best transfer, practices must have an element of compete and pressure. Having drills that mimic scenarios is a great way to see how the skills will transfer at game speed. To further challenge the athletes, have them make decisions within a drill to ensure they are thinking at game speed along with being able to complete the skills.
- Expert level athlete example: Closed environment and constant practice is most likely only used as a warmup to fine tune specific motor programs, and improve physical and psychological readiness. The majority of their practice time should involve pressure, decision making, time or movement constraints all designed to produce a favourable outcome in a game.

Skill Continuum Model



Figure 1. Practice Variable Skill Continuum

APPLICATION

The final step in improving our practice design is thinking about how we will actually implement this. We now have a collection of skating drills designed to teach fundamental to advanced skating skills; an understanding of how to progress development through practice; and an appreciation of motor learning principles that can be supported through the use of practice variables. But what do we do with all of this? Just knowing is not enough, we must put these ideas in action.

Process

- 1. **Assess your team's needs:** This is a skill coaches are generally strong at. Assessing areas of weaknesses and what needs to be improved on.
- 2. **Make a plan to improve these weaknesses:** Practicing a high-level skill, alone, will not always lead to improvement. That's why we break down skills to the root of the weakness and progress the skill through practice variables.
- 3. **Motivate your athletes:** Athletes won't always do something just because you say so. You must empower them to want to do it. When an athlete does not fear failing, wants to get better, understands why and how something will make them better, and gets rewarded for these behaviours (praise, fun drills, games, etc) they are likely going to be more engaged.
- 4. **Be specific:** Tell them what they are doing well, or what they can do instead. Versus saying "don't do that".

Strategy

- * The younger athletes are, the less information or time I spend talking about a skill. As a coach you should know all of the criteria you are looking for in a skill, but the athlete does not need to know that.
- Provide a descriptive name of the skill, show them the skill, then have them do it. After that give them some feedback, being one or two suggestions, and have them do it again.
- If there is a common error occurring, demonstrate to the group the technique you are seeing, and the ideal technique. Ask them which demonstration they think looks faster, more controlled, more powerful, etc.
- Depending on the engagement, you can further elaborate and ask them why they think it is faster or more powerful, this will have them come to the conclusion, on their own, of what needs to be corrected.
- * This process may not change the actual skill right away, but it gets the athlete thinking about how to do it and why it is important to do a specific technique.

Teaching Methods

- Balance First Approach: If an athlete does not have balance in a skill, it is the first thing that must be worked on in order to progress. Teaching body positioning and weight transfer in the skill must come before the technical aspects.
- * **Exploration:** Have athletes attempt and explore skills on their first attempt without being strict on how they should do it, give them small suggestions each attempt, ask them if they felt a difference or not.
- * Challenge: When you have athletes of different abilities or confidence levels, give them a "challenge option".

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They can either do the skill one way (same way they have been practicing, or a more simple version of the skill) or they can try the challenge drill. This leaves it up to the athlete to make the decision to ensure they aren't pushed beyond their challenge point, but still challenges the more advanced skaters in the group or on the team

* Encourage Risk Taking: Set the stage by saying it is okay to fall or not be successful. Technical skating drills are designed to be difficult to challenge the athlete. The only way to improve is through challenging them.

PART 3: ATHLETE CONSIDERATIONS

OBJECTIVE - To put all of the puzzle pieces together to create the best atmosphere for athletes to learn skating skills.

INTRODUCTION

This section of the coaching guide will discuss how to create a positive learning environment through motivation tactics, feedback strategies, coaching cues, and factors that may aid in skating development through athlete-centered coaching.

Athlete - Centered Coaching

In comparison to coach-centred coaching, this approach puts the athletes needs above the coach's. A coach that has an athlete-centered approach cares about all dimensions of an athlete's well-being and development above their own success.

Coaching Philosophy

A coach should have a philosophy that they follow and adhere to throughout their season. The athletes should be aware of this philosophy, understand it, and seek clarification on anything they do not understand. A philosophy should be your own, but needs to share similar values and principles of the other members on your bench staff.

Team Culture

As a coach, it is your job to instil the kind of team culture you want from your team from the beginning of the season. Although a culture can be different from team to team, a team culture is all about mutual respect for your teammates, team members leading by example, and a common belief that sharing these values and principles will help you achieve your goals.

ATHLETE MOTIVATION

Intrinsic VS Extrinsic Motivation

Intrinsic motivation comes from within the athlete. It is where an athlete is motivated to do something because they see how they can benefit from it (I.e. improve their skating skills because they want to be the best ringette or hockey player).

Extrinsic motivation is where an athlete is motivated to do something based on external factors (I.e. coach bargains with the athletes to do a drill, in turn for playing game afterwards).

Usually extrinsic motivation only works in the short term. It might be necessary to motivate your athletes from time to time. However, encouraging athletes to find intrinsic motivation will have greater, lasting effects on their long term development.

When athletes feel competent or confident they are more intrinsically motivated to succeed or try. As a coach you can manifest an engaging environment through you tone you set and energy you bring.

Positive Reinforcement Vs Negative Reinforcement

Positive reinforcement rewards athletes for desirable behaviour (I.e. the players executing the cue you just gave them, the coach praises the athletes and moves on to a fun drill).

Negative reinforcement disciplines athletes because of undesirable behaviour (I.e. the player is not attempting the cue you just gave, the coach scolds the player and makes them and/or the team do a hard lap). Between these two strategies positive reinforcement fosters better development in the athletes. The examples provided are based on two extremes to highlight the differences.

Key Points:

1) Extrinsic Motivation: Has it's place in an individual practice session, when needed.

2) Intrinsic Motivation: Achieves consistent motivation in your athletes. Establishes a desire in themselves to be better.

3) Positive Reinforcement: The best way to let your athletes know they having success with the skill and motivating them to continue doing that.

- * Although positive phrases like "good job" are nice to hear as an athlete, try being more specific in what the desirable behaviour.
- For example: "Good job at bending your knees and getting low in your stride, see how much faster you are by doing that!"

4) Negative Reinforcement: Damaging to the coachathlete relationship. Demotivates the athlete against further development.

- Refrain from "don't do that" or "stop doing that" language. Use "instead of ____ lets do this, because of ____"
- * Athletes need a specific action plan if they do not know what they are doing wrong.

PRACTICE ENVIRONMENT

CRITERIA FOR CREATING AN OPTIMAL PRACTICE ENVIRONMENT:

- 1. Positive / Supportive Learning
- 2. Time Management
- 3. Encouraging
- 4. Challenging
- 5. Safe
- 6. Engaging and Fun

Positive Learning Environment

A positive learning environment is fostered through challenging your athletes and encouraging and supporting failure as part of the process. Research shows that positive reinforcement through specific feedback is the best way to change behaviours and develop skills. Singling out and criticizing athletes creates a fear element that fails to motivate lasting improvement.

Time Management

Time on the ice should be managed for as much active learning as possible. Plan to discuss tactics off the ice with your team, and then implement them on the ice. When discussing technical elements throughout a practice, gauge your conversation based on the age and skill level of your athletes. Keep it simple, but make sure to explain why the skill is important or how it can be utilized in a game. This will increase the athletes buy-in.

Encouragement

Athletes need to be encouraged, especially when they are not confident in a skill. Assure the athlete that you will help them to continue to work at the skill and encourage them to keep practicing whenever they have the chance. Skating skills will take time to develop as they are specific skills and movements that are not used in daily life often.

Another option is to have the athlete try a regressed version of the skill. This should allow them to experience success, and they will not lose motivation to work on the skill.

Challenge

To kindle an athlete's motivation, they must be challenged. Certain athletes will enjoy harder challenges than others. Nonetheless, in order to learn and improve each athlete must experience an element of challenge. You are providing an appropriate level of challenge when an athlete is able to process and execute the task with some degree of proficiency after only a few attempts (but certainly more than one).

Safety

The safety of your athletes should be the number one priority in your practice sessions. Athletes should feel safe to be themselves, practice skills, and freely communicate with their team and coaches. Mutual respect between teammates, players, and coaches should be adhered to. A practice environment should be free of all forms of harassment/abuse (physical, psychological, emotional, and sexual) and discriminatory actions or comments based on (race, sexual orientation, sex and gender, impairments, and disabilities).

Fun/Engagement

How do you foster engagement from your athletes?

- * Relationship: Talk to your athletes, get to know them, ask them questions, build their trust.
- Create autonomy: Give them some choice, earn their respect, learn from them / get them to teach you, accept some challenge.
- * Get buy-in: Give them real life examples of how they can use skills in a game.
- Model the type of behaviour you want to see: act in a way that you want them to act.

How to make an enjoyable environment?

- Give them something fun at the start and the end of each practice: play games (battles, races, shootouts), let them pass, shoot, try cool ring/puck tricks, chat with coaches/ teammates, etc.
- * Lead by example and show them that you want to be there.

CUEING & FEEDBACK

Feedback strategies

- * Use selective feedback: do not tell them everything that could be improved with their technique. Give one or two suggestions to try on their next attempt.
- * Try to give athletes at least 60 seconds after completing a drill to give them feedback.

Cueing Strategies

* Less is more:

- Beginner level = 1-2 cues
- Intermediate level = 2-3 cues
- Advanced level = 3-5 cues
- ***** Use analogies as cues first:
 - Instead of "bend your knees" use "pretend you're sitting on a chair"
 - Use external cues / things to focus on
 - If you want them to keep their head up on a stop, have them tell you how many fingers you are holding up when they stop (be in a spot you want them to look at).

Steps to most effectively cue an athlete:

- 1. Explicit **first** (External focus)
 - Example: "Keep your eyes on the scoreboard through the entire drill".
- 2. Implicit **second** (Internal focus)
 - Example: "Keep your inside shoulder up on your turns".
- 3. Kinaesthetic **last** (hands-on)
 - Example: Using your stick to move an athletes shoulder up on a crossover so that the shoulders are level.
- 4. Consider skill difficulty (make less challenging if possible)
 - Example: When working on outside edges let the player step out to re-gain balance, instead of always crossing over and being on one skate.
- 5. Consider any potential limitations or barriers
 - Example: If an athlete does not have the strength and stability to balance on the flats of their blades, then they will need to gain this physical adaptation before you will be able to correct it on the ice.
- * Progress as needed through the steps in this order.

STRENGTH AND CONDITIONING

Ringette and hockey are highly technical sports that require skillsets outside of just the physical demands of skating. Nonetheless, strength and conditioning training tailored to the sport and to each individual athlete will make for better, well rounded players. Developing these characteristics will not only increase performance in sport, but will also set the stage for physical literacy that will translate across sport domains and provide the athletes with a foundation for a healthy lifestyle.

Musculoskeletal / Neuromuscular Demands	
Strength	Strength is a fundamental component of fitness that is needed in ringette/hockey to improve an athletes power / explosiveness, win ring battles, keep control of the ring / puck, and shoot / pass with more force
How to improve strength?	Consistent full-body resistance training 2 - 3 times / week (Squat, Hinge, Horizontal/ Vertical Upper Body Push, and Horizontal/ Vertical Upper Body Pull) *see general strength exercises for more info
Power	Power in skating is improved through training an athlete's skating technique and through strength training (creating more force over time)

Ringette & Hockey Needs Analysis

Musculoskeletal / Neuromuscular Demands		
How to improve power?	Improvements in strength will cause improvements in power (Force * Velocity = Power). Another way to improve power is to focus on improving the speed of movements in resistance training exercises.	
Speed	How fast an athlete can move.	
How to improve speed?	Move fast and move efficiently. Do 15-40m sprints as well as linear and lateral movement mechanics both on and off the ice.	
Agility	Agility is a players ability to respond to a stimulus (opposition, shot, pass, etc).	
How to improve agility?	Practice change of direction movements in response to something or someone. Responding to a situation or opponent's movement while improving change of direction ability and technique will improve an athletes agility.	
Quickness	Quickness is a players ability to accelerate and decelerate (how quickly they can increase and decrease their speed).	

Musculoskeletal / Neuromuscular Demands	
How to improve quickness?	 Practice acceleration and deceleration mechanics and movements. In general, an athlete should have a forward lean, produce as much force as possible through the ground or ice, and move legs as fast as possible to improve their acceleration. Deceleration can be improved through exercises that have to absorb force quickly and utilize it to be explosive in a different direction (example: plyometric exercises). Quickness can also be improved through change of direction and change of speed exercises.
Mobility	 Hip mobility is important for improving an athlete's ability to perform different skating techniques. Ankle mobility is important for an athlete to feel balanced in low positions Shoulder mobility is important to retain function of the upper body and maintain good posture in daily life.

Musculoskeletal / Neuromuscular Demands		
How to improve mobility?	 Movement preparation (actively moving the target joint to increase the range of motion before activity or dynamic stretching). Strengthen opposing muscles, stretch affected muscles. Consistent stretching to increase flexibility. Consistent strength training through full ranges of motion of target joint. 	

Energy System Demands		
Aerobic Energy System	Important for maintaining high energy levels throughout the whole game. Having a cardiovascular capacity to adequately recover in between shifts is important to have consistency in game play from shift to shift.	
Anaerobic Energy System	Important for maintaining high intensity for a whole shift (30-60 seconds). By improving your Anaerobic capacity, your muscles will have a greater ability to use lactate as energy and be able to sustain higher intensities for longer periods of time.	

* This is a general needs analysis to help a ringette or hockey athlete establish a foundation of fitness and conditioning.

* These needs can be addressed both directly (by training them) and indirectly (through involvement in other sports).

Considerations to Implement Strength & Conditioning:

- Hire a trained professional (strength and conditioning coach) to make a training plan and run training sessions.
- * Get athletes working at improving these qualities year round. Encourage regular resistance training and participating in other sports and activities.

If it is not possible to hire someone to do this for you here are a few general principles you can follow to work at improving these qualities in your athletes.

FITT Principle:

- **Frequency** = how often are you training?
 - 1X / week, 2X / week, 3X / week, etc.
- *** Intensity** = how intense is the training session?
 - Weight = amount lifted or % of maximum amount of weight lifted (% of 1-Rep Max or 3-Rep Max).
 - A 1-Rep Max is the maximum amount of weight / resistance you can lift once.
 - Rate of perceived exertion (R.P.E) on a scale of 1-10.
 - R.P.E means how hard you are working on a scale of 1-10 (1 being very easy and 10 being extremely difficult).
- **Type** = what type of training is it?
 - Aerobic, Anaerobic (run, bike, row, etc.) Resistance training (strength, power, S.A.Q.), mobility, etc.
- *** Time** = how long is the training session?
 - 20 minutes, 30 minutes, 45 minutes, 60 minutes, 90 minutes, etc.

Progressive Overload:

- * A training program must progressively get harder to continue to challenge the athlete and create adaptations. It must also start at an appropriate point based on the athletes current fitness level. If this is not gauged properly, the athlete will struggle to recover and will not have optimal adaptations.
- * Programs can progress in two different ways through increasing volume or intensity.
 - To increase volume the amount of work would be increased (reps and/or sets).
 - To increase intensity each workload is increased (weight and/or speed of the movement).

2X2 Rule:

* On the last two consecutive sets, if an athlete can lift 2 or more reps, weight can be increased at the next training session

Recovery Methods: Active Rest

* Active rest is when an athlete does a recovery workout. These exercises can be mobility based, and include some low intensity cardio. Movement is good for the body and these types of workouts are more beneficial than cancelling the workout when athletes have a game the next day. You should also consider them as part of their regular training sessions when they have an intense week.

Recovery Methods: De-loading

- * The method of de-loading is when the overall volume of training is decreased (sets and/or reps).
- * De-loading is typically used to give athletes a lighter week, allowing them to recover and achieve peak of performance the following week.

De-loading can also be used leading up to competition to ensure the athletes are peaking for important competitions.

Movement Category	Bi-Lateral Exercises	Uni-Lateral Exercises
Lower body Push	Squat	Split Squat, Rear- Foot Elevated Split Squat
Lower body Hinge/Pull	Deadlift, Hip- Thrust	Staggered Stance Deadlift, Single- Leg Hip Thrust
Upper Body Horizontal Pull	Row	Single-arm Row
Upper Body Horizontal Push	Chest Press	Single-arm Press
Upper Body Vertical Pull	Pull-up	Single-arm Pull- down
Upper Body Vertical Push	Shoulder Press	Single-arm Shoulder Press

Primary General Strength Training Exercises:

- * Exercises should be executed properly and safely with body weight or minimal resistance before progressing to heavier resistance or weights.
- * Having knowledge on how to execute and coach these fundamental movements is imperative for safety with resistance training. Hiring a strength and conditioning professional is recommended whenever something is outside of your scope or expertise as a coach.
Accessory General Strength Training Exercises:

Movement Category	Exercises
Rotational	Med-ball Scoop Toss
Anti-Rotational	Paloff Press
Flexion/ Extension	Flexion: crunch, hollow hold Extension: back extension, superman
Anti-Flexion/ Extension	Plank, bear crawl/hold, dead bug, bird dog, side plank

Set/Rep Schemes

Primary exercises (reps)

- Strength : 1-6 reps
- Power : 1-5 reps
- Hypertrophy : 6-15 reps
- Endurance : 12+ reps

Primary exercises (sets)

- Beginner: 2-3 sets
- Intermediate: 3-4 sets
- Advanced: 5+ sets

Accessory exercises (reps)

- Strength : 5-10 reps
- Power : 1-10 reps
- Hypertrophy : 8-20 reps
- Endurance : 15+ reps

Accessory exercises (sets)

- Beginner: 1-2 sets
- Intermediate: 2-4 sets
- ◆ Advanced: 3-4 sets

The majority of the drills in the skating and skills section have a video demonstration on the Competitive Edge Power Website: Skating Skills Videos

Contact me!

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