

SKI **PLAY**GROUND

Contents

- INTRODUCTION 3**
- SKI PLAYGROUND OBJECTIVES..... 3**
- SKI PLAYGROUND BENEFITS..... 3**
- SKI PLAYGROUND WITHIN THE SKILL DEVELOPMENT PROGRAMS (SPD) 3**
- SKI PLAYGROUND GUIDED AND SELF-DIRECTED PLAY 4**
- INCLUSION OF PARA NORDIC ATHLETES 4**
- CREATING A SKI PLAYGROUND 4**
 - SITE SELECTION4
 - SITE PREPARATION4
 - EQUIPMENT AND MAINTENANCE5
 - LEVEL OF DIFFICULTY5
 - THE A AND B LINE5
 - SEQUENCE OF ACTIVITIES6
- USING THE SKI PLAYGROUND 6**
- COACHING IN THE SKI PLAYGROUND 6**
 - BASIC TECHNIQUE 6
 - BODY POSITION..... 6
 - TRANSITION 8
 - SUMMARY 8
- PLAYGROUND FEATURES 8**
 - FOUNDATIONS 8
 - 1. Arches..... 8
 - 2. No Poles..... 9
 - 3. Bell Ringing..... 11
 - 4. Obstacles 12
 - 5. Bicycle Bumps 13
 - 6. Bump Run 14
 - 7. Maze 15
 - DOWNHILL DRILLS 16
 - 1. Funnel 16
 - 2. Speed Zone 18
 - 3. Changing Tracks..... 19
 - 4. High Speed Turn..... 20
 - 5. Giant Slalom 21
 - ADVANCED TECHNIQUE..... 22
 - 1. Ramp 22
 - 2. In-Line slalom..... 24
 - 3. Uphill Slalom 25

4. Circle	27
5. Sprint Start	28
6. Sprint Finish	29
7. Technique Zone (Classic and Skate)	30
NORDIC STRATEGY	31
1. Stop Drop and Prone	31
2. Ball Throw	32
NORDIC COMBINED AND SKI JUMPING	33
3. Inrun	Error! Bookmark not defined.
4. Telemark Holds	34
5. Drops Jumps	34
RESOURCES	36
APPENDIX.....	37

INTRODUCTION

- There is no denying that in the early development of ski/movement skills among children, the value of play and discovery cannot be overstated. A challenging and engaging environment inviting skiers to explore and expand their skills, competencies, and enjoyment is foundational to not only the technical development of our sport, but also to establishing a progressive and open-ended learning pathway.
- Nordiq Canada, Biathlon Canada, Nordic Combined Ski Canada, and Ski Jumping Canada have created the nordic snowsports ski playground where aspiring young athletes from all the nordic sports can develop and learn common skills together.
- The following resources are intended to be used anywhere there is snow and a bit of space, adaptable to your local surroundings, needs and imagination.
- As coaches, instructors, learning facilitators, etc., the key is to let the environment teach. Set up the challenges so that young skiers are challenged to explore and discover the possibilities.
- The information contained in the following document is intended to help coaches cue in on key developmental benchmarks and to adapt the challenges and environment to bring these forward, not to have the skiers think or become self-conscious of “doing it right”. The environment will do the teaching. So step back, ensure that the space is safe, encourage exploration and watch the skiers progress!

SKI PLAYGROUND OBJECTIVES

- **FUN**
- Athlete agility, balance, fitness, confidence
- Develop foundational skills across nordic snowsports

SKI PLAYGROUND BENEFITS

- **FUN**damentals
- The ski ground is for very EVERYONE!
- Natural learning through play
- Anything goes
- Less talking – more skiing
- The environment is a natural teaching tool
- An opportunity to engage volunteers in the community

SKI PLAYGROUND WITHIN THE SKILL DEVELOPMENT PROGRAMS (SPD)

- Complements existing SPD resources
- Creates a fun, active learning environment based on self-discovery

- Provides progressively challenging activities for all ages but is targeted to 4-12 year-olds
- Easy to apply

SKI PLAYGROUND GUIDED AND SELF-DIRECTED PLAY

- Encourage kids to play
- Encourage parents to take their kids to explore and play on their own
- Make the ski playground or aspects of it accessible outside of program time

INCLUSION OF PARA NORDIC ATHLETES

- Para nordic athletes - including sit skiers, standing, and visually impaired - can participate in the ski playground.
- There are no limitations, as activities can be adapted for all levels of Para skiers.
- Use many of the activities as challenges for developing guide skills and relationships for visually impaired (VI) athletes.
- Be aware of environmental factors as Para athletes may feel things differently, like temperature.

CREATING A SKI PLAYGROUND

- Be familiar with the nordic programs using the ski playground; Bunny Rabbits, Jack Rabbits, Track Attack, Biathlon Bears, etc.
- Get a shovel, snow and an open space and use your imagination!

SITE SELECTION

- Obtain approval and support from the property area owner or authority.
- Incorporate club groomers where possible.
- Don't be paralyzed by perfection! Use what is available.
- Kids love adventure – use trees, obstacles, etc.
- Respect the space – practice *Leave No Trace* policies.
- Ideal site – large flat surface, with gentle slope nearby.
- Provide some form of shelter near by.

SITE PREPARATION

- Ideally prepared with fresh snow – but make what you have work!
- Need 30 min to 60 min to prep weekly - more hands make light work – involve the athletes where possible.
- Use skis or snowshoes when moving in the area to avoid making depressions and holes with footprints.
- Design the park to be as easy to maintain as possible.

- Utilizing existing terrain where possible (bike / snowshoe trails, openings in forest alongside existing trails, etc.).
- Creativity and innovation required – from coaches, parents, and athletes.
- Build to encourage discovery – create flow from one activity to the next.
- Ensure long run-out options with areas free from obstacles (e.g., fences, trees).
- Investment – time, sweat-equity, and creativity. Payback – FUN!

EQUIPMENT AND MAINTENANCE

- Required equipment:
 - stakes
 - flags
 - cones
 - V-boards
 - marking dye – food colouring in spray bottles works well
 - sign posts
 - shovels or snow scoops
 - rakes
 - bells
 - rope
 - poles or PVC pipe
- identify groups (athletes, volunteer parents, club members, etc.), to maintain playground.
- Set a maintenance schedule to regularly maintain the ski playground:
 - Prepare snow surfaces to minimize hard icy conditions or deep wet snow
 - Rake surfaces to remove ruts and debris
- Decorate and innovate – add cartoon characters (check for copyrights), balloons, streamers, themes, music, etc.

LEVEL OF DIFFICULTY

- A ski playground consists of several activities and challenges. Classify each activity as easy, moderate, or difficult depending on the terrain and conditions.
- The park should include activities at different levels of difficulty. For example; different sized jumps, slalom course on varying slopes, arches of different heights.

THE A AND B LINE

- Based on mountain biking approach with one easy route and one more challenging route.
- Use existing trail infrastructure to add an A or B line.
- Integrate activities along a trail.

- Useful for all ages.

SEQUENCE OF ACTIVITIES

- Individual activities are arranged and distributed according to the available terrain. Consider having various difficulties of the same exercise.

USING THE SKI PLAYGROUND

- Chose appropriate activities for your participant age groups and review the relevant materials.
- Place printed images on stakes and post at the start of each activity.
- Provide appropriate supervision.
- Assumption of risk sign is required to be posted – see APPENDIX.
- All ski playground users are responsible for skiing and using the ski playground safely. (see Appendix for example of printable sign). Make this information clearly visible.

COACHING IN THE SKI PLAYGROUND

- Create a safe, fun, appropriately challenging environment where participants learn through play.
- Manage risk by indicating appropriate challenges and encouragement while setting boundaries where necessary.
- Encourage exploration. Create opportunities for participants to move outside their comfort zone in a safe manner.

BASIC TECHNIQUE

- Combining FUN and FOUNDATIONS is the key to learning the FUNdamentals of cross-country skiing.
- Ski playground allows participants to be challenged in an engaging manner that lays the groundwork for efficient technique.

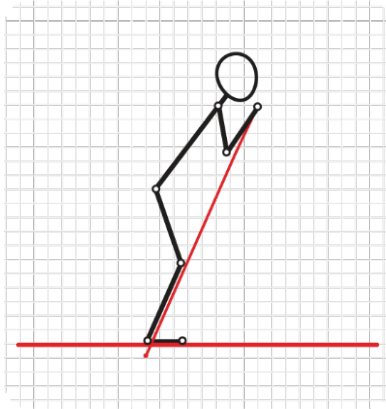
BODY POSITION

- Proper body position is the foundation of good technical development.
- The ski playground focuses on two key elements of body position:
 - A. Power Position – focus is on posture.
 - B. Power Line – focus is on balance.

A: Power Position

- The power position is where the athlete sets up the best biomechanical potential to create power pushing forward using the legs and poles.

- At this stage of development skiers are encouraged to develop good habits on posture by flexing the ankle, knee, and hips.
- To evaluate and describe the power position, view the skier from the side:



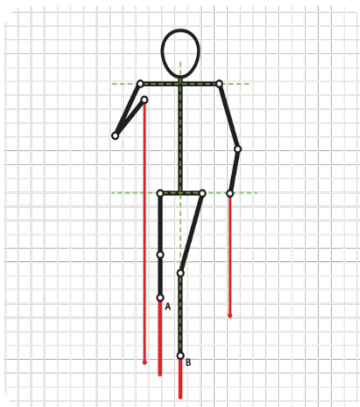
Code: B.A.
T.A.A

- The body weight is on the front half of the foot.
- The angle in the ankle, knee and hip results in the upper body and lower legs being in the same angle relative to the ground and flex together.
- Arms are positioned so the pole tips are almost next to the foot.
- In the ski playground, poles are often not used as participants establish balance.
- As balance improves, use of poles can mark progression in certain playground elements.

All athletes have different proportions; no athlete will look the same. Refer to illustration for what to look for in this position.

B: Power Line

- To evaluate and describe the power line, the skier is viewed from the front:
 - The skier's weight is in a straight line through the body during glide, either on one ski or both depending on the challenge and technique.
 - Include challenges that require the skier to be on both skis at the same time, as well as on only one ski.
 - Hips and shoulders are level and weight is equally distributed on both skis.



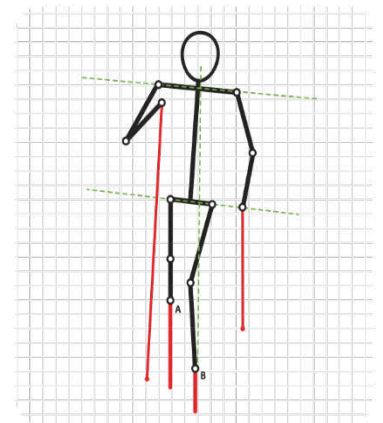
Code: B.B.1

Image B.B.1 (left)

- On one ski, as shown in illustration B.B.1, **the toe, knee, hip, and nose** are aligned, with level hips and shoulders.
- This position is maintained as the skier moves from ski to ski.

Image w.B.B.1 (right)

- This illustration shows the hip and shoulders not being level and the spine leaning to compensate instead of being straight over the foot for the duration of the phase.



Code: w.B.B.1

TRANSITION

- Transition in ski playground is maintaining the power position and power lines throughout different challenges and activities.
- The power line is maintained through the entire movement in any technique, not just as a moment in time. The skier must switch legs by holding the power line through the leg push, until the other leg is placed down, and the power line is established on that leg.

SUMMARY

- Encourage the skier to develop good, centered posture by flexing the ankle, knee, and hips.
- The skier’s weight is in a straight line through the body during the glide, either on one ski or both, depending on the challenge and technique.
- The skier maintains the power position and power line throughout different challenges and activities.
- Use activities and challenges that will promote good ski habits rather than corrective commentary.
- Terrain is the best teacher. Utilize terrain to achieve technique objectives.

Body Position	Outcome
Power Position: hip, knee, ankle flexion	<ul style="list-style-type: none"> • Sequential joint activation • Equal joint flexion and recruitment
Power Line	<ul style="list-style-type: none"> • 2 ski glide – centre of mass (COM) is over both skis • 1 ski glide – COM is over gliding ski • Power line – ensure the athlete is level through the hips and shoulders and aligned over their ski(s) with weight forward.

PLAYGROUND FEATURES

FOUNDATIONS

1. Arches

Set Up

- PVC pipes and hula hoops, make easy arches.
- Arches can be placed on flat, uphill, or slightly downhill terrain depending on skill level.
- Position arches one behind the other with enough space to allow the skier to take a few strides in between and have to reposition.
- The arches should be at a height that requires skiers to flex and extend the legs.

Technical Focus

- The skier flexes the ankles, knees, and hips, to pass through arches while keeping the COM between the skis.
- If several arches are in a row, the skier accelerates between them by taking a few steps or poling.

Adaptations and Progressions

	Set Up Adaptations	Observable Cues
Bunny Rabbit Skill	<ul style="list-style-type: none"> • Begin on flat terrain with uniform arches evenly spaced • Progress to slight incline and decline • Vary arches' heights and the distance between 	<ul style="list-style-type: none"> • Skier can go under while flexing the ankle, knee, and hip • Skier maintains posture with deeper flexing of the ankle, knee, and hip under lower arches • Consider height and width working with sit skiers. Ensure there are various heights and widths to accommodate different ranges of motion
Jack Rabbit Skill	<ul style="list-style-type: none"> • Place arches on rollers, bumps, and hollows • "Under-over" have skiers alternately hop over an obstacle between each arch • Place arches in slalom formation 	<ul style="list-style-type: none"> • Skier can maintain posture through varying degrees of flexion, with changing movements and different terrain

SDP Alignment

Bunny Rabbit Skill		<ul style="list-style-type: none"> • Diagonal stride
Jack Rabbit Skill	Level 1	<ul style="list-style-type: none"> • Ready position
Biathlon Bears	Black Bears	<ul style="list-style-type: none"> • Basic techniques

2. No Poles

Set Up

- Skiing without poles can be done anywhere in a ski playground.
- Place poles anywhere in the park.
 - The drop-off point must be accessible to several skiers at the same time.
 - The drop-off point must be clearly marked so poles are not all over the ground
 - Mark the drop-off area with dye, ropes, or stakes.

Technical Focus

- Ski without poles to work on coordination, leg strength and emphasize power position and power line.

Adaptations and Progressions

	Set Up Adaptations	Observable Cues
Bunny Rabbit Skill	<ul style="list-style-type: none"> • Poles are not recommended at this development stage 	<ul style="list-style-type: none"> • Incorporate progressively longer glide phases
Jack Rabbit Skill	<ul style="list-style-type: none"> • Encourage skiers to perform all activities without poles 	<ul style="list-style-type: none"> • Propulsion is from the legs and moves the body forward

SDP Alignment

Bunny Rabbit Skill		<ul style="list-style-type: none"> • Diagonal stride
Jack Rabbit Skill	Level 1	<ul style="list-style-type: none"> • Diagonal stride
	Level 1 -4	<ul style="list-style-type: none"> • Diagonal stride • Free glide • All techniques except for double poling and one-step double poling
Biathlon Bears	Black Bears	<ul style="list-style-type: none"> • Basic techniques

3. Bell Ringing

Set Up

- Choose a flat, slightly uphill, or downhill area.
- Hang a series of bells from a rope over the course – from tree branches, have someone holding them, etc. Coloured balloons can be use instead of bells.
- Place several sets of bells one behind the other at different heights to allow skiers of all sizes to perform the activity.
- Cones, V-boards, and ground markings are used to guide the skiers.
- Ensure runout area

Technical Focus

- This activity requires the skier to stretch the entire body and bring their COM forward.
- It should be difficult to touch the bell with both hands while sliding on the snow without losing balance.
- To increase difficulty, place the bell so the skier must jump to touch it. This makes the skier concentrate on timing, extension, and landing.
- Perform at a moderate speed. Lean slightly on the front of the foot with skis parallel then stretch fully by standing briefly on the toes.
- Touch the bell with both hands. After the stretch, try to land slightly on the front of the foot.

Adaptations and Progressions

	Set Up Adaptations	Observable Cues
Bunny Rabbit Skill	<ul style="list-style-type: none"> • Start stationary. • Incorporate displacement • Place bell higher 	<ul style="list-style-type: none"> • Upward momentum is generated by ankle, knee, and hip movement • Skier can accomplish jump without pausing • For sit skiers – sit tall and reach above forehead

Jack Rabbit Skill	<ul style="list-style-type: none"> Place one or more successive targets on a descending slope 	<ul style="list-style-type: none"> Skier can jump and maintain balance landing at higher speeds
-------------------	--	--

SDP Alignment

Bunny Rabbit Skill		
Jack Rabbit Skill	Levels 1-2	<ul style="list-style-type: none"> Ready position Free glide
Biathlon Bears	Black Bears	<ul style="list-style-type: none"> Basic technique

4. Obstacles

Set Up

- Obstacles can be placed parallel or perpendicular to the direction of travel.
- The coach indicates whether the obstacles are to be stepped over, jumped over or passed under depending on skier level
- Obstacles can be placed in locations of increasing faster terrain.
- Create obstacles using ground markings, strings, poles, V-boards, PVC pipe, stuffed animals, etc.
- Obstacles should be made of a material that will not damage skis or poles.
- Make obstacles clearly visible and recognisable.

Technical Focus

- Focus is on balance and timing while maintaining the power position and power line.
- Look for a quick return to the power position between each obstacle.
- To be able to move over the obstacles, proper choice of speed and timing are required.
- Progression can be made by first avoiding the obstacle by lifting a ski, to having the skiers jump over the obstacle where appropriate.
- Encourage fast execution of obstacle courses

Adaptations and Progressions

	Set Up Adaptations	Observable Cues
Bunny Rabbit Skill	<ul style="list-style-type: none"> Include obstacles that will make skiers go under, climb over, and change directions 	<ul style="list-style-type: none"> Skier can rapidly re-establish posture and balance
Jack Rabbit Skill	<ul style="list-style-type: none"> Provide more challenging obstacles with bigger climbs and jumps Provide space between obstacles for skiers to 	<ul style="list-style-type: none"> Skier can accelerate, stop, and change directions rapidly Control originates from skis and flexing of lower limbs.

	accelerate, build momentum and turn at speed	
--	--	--

SDP Alignment

Jack Rabbit Skill	Level 1		<ul style="list-style-type: none"> • Body position • Falling and rising • Side stepping • Star turn
	Level 2		<ul style="list-style-type: none"> • Kick turn
	Level 3		<ul style="list-style-type: none"> • Kick turn • Skate turn
	Level 4		<ul style="list-style-type: none"> • Step turn
Biathlon Bears	Grizzly Bears		<ul style="list-style-type: none"> • Turns, downhill turns

5. Bicycle Bumps

Set Up

- Mark two sets of alternating bumps on compact snow or draw the contours with strings (see illustration).
- Variant 1: Dig holes up to 2.5 m long and 30-50 cm deep with a shovel, saw or chainsaw. After snowfall, level the area with a cross-country ski track groomer and recreate the hollows.
- Variation 2: Dig holes up to 2.5 m long and 15 - 25 cm deep.
- Use the removed snow to create bumps of 25 cm next to each other then pack the snow.
- Create several mogul tracks side by side in alternating fashion to allow several skiers to pass through at the same time. This avoids skiers having to wait and slow down before the activity.
- Gates, cones, V-boards, and markings on the ground are used to guide skiers.
- Ensure bumps are appropriately spaced for sit skiers to avoid over flexing the skis, which may cause breakage.

Technical Focus

- The alternating bumps activity requires a lot of skill. To accelerate, the legs must alternately bend and extend. This activity can be performed on flat ground without much of a run-up.

- Leg speed plays an important role as the skier adopts higher speed. An upright, stable posture and a suitable rhythm are required to increase speed. Position this activity after a climb to increase difficulty.

Adaptations and Progressions

	Set Up Adaptations	Observable Cues
Bunny Rabbit Skill	<ul style="list-style-type: none"> • Set shallow tracks on flat terrain allowing skiers to set comfortable pace 	<ul style="list-style-type: none"> • Skier can shift balance from ski to ski
Jack Rabbit Skill	<ul style="list-style-type: none"> • Progress to steeper terrain 	<ul style="list-style-type: none"> • Skier maintains speed • Shoulders and hips stay level • Legs work independently of upper body

SDP Alignment

Bunny Rabbit Skill		<ul style="list-style-type: none"> • Falling and rising
Jack Rabbit Skill	Levels 1-2	<ul style="list-style-type: none"> • Ready position • Free glide
Biathlon Bears	Black Bears	<ul style="list-style-type: none"> • Basic technique

6. Bump Run

Set Up

- Build moguls and hollows on flat, uphill, or downhill terrain.
- The bumps and hollows should be close together, irregular and of different heights and lengths.
- Ensure spacing and steepness will not break skis, especially for ski skiers where over flexing the skis can cause breakage.
- Using the natural properties of the terrain saves construction and maintenance work.
- Stakes, cones, V-boards, and ground markings are used to guide the skiers.
- [Link to reference materials for dimensions](#)

Technical Focus

- Maintain balance through challenging terrain.
- Use the terrain to maintain or increase speed.
- Negotiate moguls and hollows by moving forward in classic or skate technique with a straight and stable upper body on flat or slightly uphill terrain, or by gliding on downhill terrain.
- The skier uses flexion and extension to move through the series of bumps.

- Sit skiers are able to control and propel the sled in uneven terrain.
- For VI skiers, encourage clear and timely communication between guide and skier.

Adaptations and Progressions

	Set Up Adaptations	Observable Cues
Bunny Rabbit Skill	<ul style="list-style-type: none"> • Skiers explore varying terrain based on ability 	<ul style="list-style-type: none"> • Power position and power line adapt to terrain demands
Jack Rabbit Skill	<ul style="list-style-type: none"> • Progressively increase size and speed of bumps course • Vary sizes • Incorporate some small drops 	<ul style="list-style-type: none"> • Skiers absorb bumps with legs • Skiers maintain balanced distribution of weight • Skiers' hips and shoulders are level

SDP Alignment

Bunny Rabbit Skill		<ul style="list-style-type: none"> • Falling and rising
Jack Rabbit Skill	Levels 1-2	<ul style="list-style-type: none"> • Ready position • Free glide
Biathlon Bears	Black Bears	<ul style="list-style-type: none"> • Basic technique, falling and rising
Biathlon Bears	Grizzly Bears	<ul style="list-style-type: none"> • Downhills, turns

7. Maze

Set Up

- Choose a flat or slightly uphill terrain.
- Mark two or three lines of 10-15 m each on the ground with string or dye.
- Place V-boards or poles at intervals of 0.8 to 3 m (depending on the difficulty required). Use a different colour for the outer and inner pegs.
- The stakes can be placed in a linear, staggered, or random fashion.
- Colours visually optimises the activity.

Technical Focus

- Skier should maintain good body position throughout technique changes and direction.
- Depending on the distance between the poles, the maze can be crossed using different techniques – double pole, free, classic
- Skier decides which line to follow a few metres before the maze.
- Skiers at an appropriate level can change lines in the middle of the activity to challenge skills: kick turns, side stepping, star turn.

Adaptations and Progressions

	Set Up Adaptations	Observable Cues
Bunny Rabbit Skill	<ul style="list-style-type: none"> Flat terrain 	<ul style="list-style-type: none"> Skier can unweight skis independently and change direction
Jack Rabbit Skill	<ul style="list-style-type: none"> Incorporate into agility courses so skiers enter with speed Place on slight descent Play tag or have pursuits in maze 	<ul style="list-style-type: none"> Skier can speed up and slow down as required Skier maintains posture while adjusting flexion and leading into turns

SDP Alignment

Bunny Rabbit Skill	Changing Direction	<ul style="list-style-type: none"> Star turn
Jack Rabbit Skill	Level 1	<ul style="list-style-type: none"> Star turn Side stepping Diagonal stride
	Level 2	<ul style="list-style-type: none"> Double pole Diagonal stride Kick turn
	Level 3	<ul style="list-style-type: none"> Kick double pole Free technique Skate turn
	Level 4	<ul style="list-style-type: none"> One skate Two skate Step turn
Biathlon Bears	Black Bears	<ul style="list-style-type: none"> Basic technique
Biathlon Bears	Grizzly Bears	<ul style="list-style-type: none"> Skating techniques Downhill turns

DOWNHILL DRILLS

1. Funnel

Set Up

- Draw or mark a V-shaped funnel in the snow (e.g., with rope or dye).
- The marking can be used to represent the braking zone.
- Cones, V-boards, and ground markings are used to orientate skiers. Soften icy passages with a rake.
- The final narrowing can be enhanced with an arch, for example.
- Ensure run-out area is clearly marked with sufficient space to brake.

Technical Focus

- Skier controls downhill speed while maintaining control and good body positioning to develop comfort at speed.
- Skier learns to brake or stop the descent by ploughing, half ploughing or skidding.
- To do this, the skier must put more or less weight on the edges by flexing and extending the knees and ankles. The skier should stand upright with their arms at the side and poles to the rear.
- The goal is to brake later and later, which requires increasing braking force. By repeating the activity, the skier becomes better at judging the braking distance and increases safety.
- For sit skiers, speed checking can include pole picking, pole dragging, handle dragging, or carving. As sit skiers do not have brakes, choosing progressive downhill through speed check progression is important.
- For visually impaired athletes, guides communicate changes in direction, speed, technique change, and practice pole holds.

Adaptations and Progressions

	Set Up Adaptations	Observable Cues
Bunny Rabbit Skill	<ul style="list-style-type: none"> • Set up on flat terrain initially having skiers match the 'v' • Encourage skiers to glide into the stopping zone 	<ul style="list-style-type: none"> • Skier can control the direction of the skis • Sit skier progressions: <ul style="list-style-type: none"> ○ Picking/Dragging ○ Skidding ○ Carving
Jack Rabbit Skill	<ul style="list-style-type: none"> • Place at end of progressively steeper slopes • Place stopping funnels intermittently in slalom courses • Play Redlight/Greenlight 	<ul style="list-style-type: none"> • Skier maintains position with weight on mid to fore foot • Braking power is generated through flexion of ankle, knee, and hip

SDP Alignment

Bunny Rabbit Skill		<ul style="list-style-type: none"> • Falling and rising
Jack Rabbit Skill	Level 1	<ul style="list-style-type: none"> • Snowplow braking
	Level 2	<ul style="list-style-type: none"> • Snowplow stop
Biathlon Bears	Black Bears	<ul style="list-style-type: none"> • Basic techniques • Falling and rising
Biathlon Bears	Grizzly Bears	<ul style="list-style-type: none"> • Downhills • Stopping • Controlling speed

2. Speed Zone

Set Up

- Chose a slope that will allow the skier to reach a challenging speed.
- Increase the activity difficulty by choosing uneven terrain.
- The end of the speed run should be clearly marked and have sufficient space to brake.
- The track should be marked with poles, cones, V-boards, or markings on the ground to avoid collisions.

Technical Focus

- The skier must adopt the downhill position after a short acceleration, direct their gaze towards the racing line, keep the skis parallel and flat, and distribute their weight evenly over all his feet.
- The downhill tuck position allows the skier to pick up speed and accelerate significantly. At the end of the descent, the skier discovers how much speed can be gained and when to start moving again.

Adaptations and Progressions

	Set Up Adaptations	Observable Cues
Bunny Rabbit Skill	<ul style="list-style-type: none"> • Set objects on a flat course for skiers to bring back as quickly as possible • Slight downhill with object for skier to pick up 	<ul style="list-style-type: none"> • Skier demonstrates rhythm moving entire form forward using legs • Skier can glide to target maintaining posture
Jack Rabbit Skill	<ul style="list-style-type: none"> • Vary between flat, slight uphill and downhill • Alternate fast and slow zones. • Increasingly steeper downhills adding in small climbs • Apply to any technique or skill • Use a speed gun to measure speed! 	<ul style="list-style-type: none"> • Skier can maintain good technique while attempting to go as fast as possible. • Skier can slow down and speed up while holding posture and balance. • Skier can maintain posture and balance through varying terrain. • Skier can carry momentum on rises

SDP Alignment

Jack Rabbit Skill	Level 3	<ul style="list-style-type: none"> Downhill tuck Free skate
	Level 4	<ul style="list-style-type: none"> Free skate
Biathlon Bears	Grizzly Bears	<ul style="list-style-type: none"> Downhills, turns
Biathlon Bears	Polar Bears	<ul style="list-style-type: none"> Carrying momentum

3. Changing Tracks

Set Up

- Perform this activity on flat terrain, or a slight up or downhill slope.
- On flat ground or slight uphill slope, prepare two tracks 1 to 2 metres apart with a machine or trace them on foot in soft snow.
- Gates or obstacles signalling a change of track should be placed every 4 to 6 metres.
- Speed is determined by the distance between gates or obstacles, no additional steps may be taken between them.
- Gates, cones, V-boards, and markings are used to guide skiers.
- Communication for guides of VI skiers and learning timing.
- VI guides should pre-ski the course to be familiar with it.

Technical Focus

- Changing track is a key skill during competitions. In classic technique, the track can be changed by using a double pole or an alternating step with a diagonal pole.
- Sit skiers: double pole plant and thrust, ski tips up and push in or out of the track.
- For VI athletes, guides communicate changes in direction, speed, location of track, trail conditions, and technique change.

Adaptations and Progressions

	Set Up Adaptations	Observable Cues
Bunny Rabbit Skill	<ul style="list-style-type: none"> Paint lines on flat terrain for skiers to follow Entering and exiting single set of tracks 	<ul style="list-style-type: none"> Skier can move sideways while still moving forward
Jack Rabbit Skill	<ul style="list-style-type: none"> Increase distance between track sets Create a grid with several tracks, have athletes cross multiple tracks Place obstacles in tracks for athletes to go around 	<ul style="list-style-type: none"> Skier maintains posture and balance Skier maintains forward momentum Skier can glide diagonally on one ski between tracks

SDP Alignment

Jack Rabbit Skill	Level 3	<ul style="list-style-type: none"> Downhill tuck Free skate
	Level 4	<ul style="list-style-type: none"> Step turn
Biathlon Bears	Grizzly Bears	<ul style="list-style-type: none"> Downhills Turns

4. High Speed Turn

Set Up

- Take advantage of the natural terrain to avoid having to move large amounts of snow.
- The speed of the run-up should be adapted to the radius of the curve.
- A 180° banked turn done at high speed; it is possible to make a 180° banked turn on flat terrain after a descent by compressing a sufficient amount of snow.
- Force skiers to choose a line as far below the radius of curvature as possible by marking the ground.
- Create several 90° banked turns in a line to make the activity more fun.

Technical Focus

- Complete the turns in a standing or downhill position. The skier must feel and use centre of gravity and compression forces. The aim is to pass the compression point keeping the skis parallel, while stooping, without reducing speed.
- The goal is to pass the compression point while keeping skis parallel and lowering the skis without decreasing the speed. For variety, this activity can also be performed while skiing on the outside of the turn.
- Create a progressive approach - increase speed incrementally as skier becomes more comfortable (progressive increase in pitch and speed); allow for a long run out zone.
- Sit skiers – counterbalanced picking – pole assisted turn to skidding to carved as applicable.

Adaptations and Progressions

	Set Up Adaptations	Observable Cues
Bunny Rabbit Skill	<ul style="list-style-type: none"> Not targeted for this stage of development 	
Jack Rabbit Skill	<ul style="list-style-type: none"> Start with flat slalom encouraging skiers to carry speed into the turns Move to steeper hills and make turning radius tighter 	<ul style="list-style-type: none"> Skier can maintain speed through turns Skier is equally adept turning to either side

	<ul style="list-style-type: none"> • Incorporate climbing between turns 	<ul style="list-style-type: none"> • Skier can anticipate line of entry and exit of turn without braking or slowing down • Sit skiers can progress from in track to out of track as applicable
--	--	--

SDP Alignment

	Level 2	<ul style="list-style-type: none"> • Snowplow turn • Herringbone
	Level 3	<ul style="list-style-type: none"> • Skate turn • Free skate
	Level 4	<ul style="list-style-type: none"> • Step turn • Side slipping • Free skate • Offset
Biathlon Bears	Grizzly Bears	<ul style="list-style-type: none"> • Downhills • Turning

5. Giant Slalom

Set Up

- Position the poles, gate flags, cones, etc. 3 to 4.5 m apart to allow for a smooth passage.
- Create a giant parallel slalom to allow ample space for skiers to navigate course.
- For added challenge, incorporate bumps, dips, and flat sections.
- Create progressive grades and distances between and poles as skier skill improves.

Technical Focus

- Giant slalom on cross-country skis is demanding. Passing through the gates, estimating the radius and the choice of speed are of crucial and require a lot of practice.
- The turn is initiated through the legs as the skier emphasizes ankle and knee flexion to make the turn using the edges of the ski.
- The skier initiates turns to pass through the gates by slightly rotating the torso then follows the ideal line. Sit skiers initiate turn with torso, hips, and poles as ability permits.
- Progress to minimal braking and carrying speed through turns.

Adaptations and Progressions

	Set Up Adaptations	Observable Cues
Bunny Rabbit Skill	<ul style="list-style-type: none"> Flat winding course 	<ul style="list-style-type: none"> Skier can change direction while moving forward
Jack Rabbit Skill	<ul style="list-style-type: none"> Select slope where momentum is carried provide more completion of turns for controlling speed Align turns to the fall line of the slope to carry speed Progress to accelerating out of the turn using skate steps 	<ul style="list-style-type: none"> Skier maintains posture as speed increases Skier can link turns without loss of speed Skier avoids braking Skier selects lines of entry and exit to avoid needing to brake Skier applies side slipping where appropriate to control speed Skier accelerates through turns

SDP Alignment

Bunny Rabbit Skill		<ul style="list-style-type: none"> Diagonal stride Star turns
Jack Rabbit Skill	Level 1	<ul style="list-style-type: none"> Star turn Free glide Snowplow braking
	Level 2	<ul style="list-style-type: none"> Free glide Snowplow turn
	Level 3	<ul style="list-style-type: none"> Skate turn Free skate Downhill tuck
	Level 4	<ul style="list-style-type: none"> Parallel side slipping Step turn
Biathlon Bears	Grizzly Bears	<ul style="list-style-type: none"> Downhills Tucking Turns

ADVANCED TECHNIQUE

1. Ramp

Set Up

- Use natural ramps such as undulations, bumps, steep slopes, etc. Integrate several natural ramps into the ski playground.
- Use ground markings where you have to change steps.
- Include ramps without indicating the changeover areas.

- Design ramps attractively with stakes, cones, V-boards, and markings.
- Create a variety of sizes for different skill levels.

Technical Focus

- Steep ramps are ideal for working on technique changes. A good skier is distinguished by efficient technique changes.
- In classical technique, change from the double pole to the one kick double pole, diagonal stride, to herringbone.
- In skate technique, change from one-skate to two-skate to offset, then to diagonal skate (coach skate). The change of step and its timing are important at the beginning of the ramp, as well as the end.
- Adapt to terrain and be mindful of tempo and maintaining speed.

Adaptations and Progressions

	Set Up Adaptations	Observable Cues
Bunny Rabbit Skill	<ul style="list-style-type: none"> • Follow the leader type course on undulating terrain • Use stuffed animals as way points • Provide path options of different challenges (climbing/descending) allowing skier to choose 	<ul style="list-style-type: none"> • Skier can change from displacement on flats to climbing to appropriate descending • Maintains balance through changing terrain
Jack Rabbit Skill	<ul style="list-style-type: none"> • Incorporate as many alternating features as possible and in rapid succession • Have skiers frequently cross fall line 	<ul style="list-style-type: none"> • Skier can anticipate changes in terrain • Skier maintains speed through transitions • Skier chooses appropriate technique for terrain

SDP Alignment

Bunny Rabbit Skill	<ul style="list-style-type: none"> • Climbing to new heights 	<ul style="list-style-type: none"> • Diagonal stride • Side step • Herringbone
Jack Rabbit Skill	Levels 1	<ul style="list-style-type: none"> • Diagonal stride • Herringbone • Free glide
	Level 2	<ul style="list-style-type: none"> • Diagonal stride • Herringbone • Double pole

		<ul style="list-style-type: none"> • Free glide
	Level 3	<ul style="list-style-type: none"> • Diagonal stride • Double pole • One-step double pole • Free skate • Downhill tuck • Diagonal skate
	Level 4	<ul style="list-style-type: none"> • One-step double pole • Free skate • One-skate • Two-skate • Offset
Biathlon Bears	Polar Bears	<ul style="list-style-type: none"> • Technique changes • Carry momentum, faster skiing • Transitions

2. In-Line slalom

Set Up

- The chosen terrain (flat, sloping, or mixed) will define level of difficulty.
- Undulations, bumps, hollows, and any other obstacles such as trees or signs can increase the difficulty of the slalom.
- Spaces between poles may vary from tighter to more spaced and allow for variation of rhythm.
- Parallel slalom tracks make for exciting head-to-head racing.
- Poles, cones, V-boards, and ground markings are used to guide the skiers.

Technical Focus

- Choose the most direct line through the poles.
- The in-line slalom can be performed in classical technique using the simultaneous double pole or one-step, or in skate using one-skate, two-skate or offset.
- Skier adjusts rhythm to suit terrain. The rhythm and changes of direction must give a dynamic movement.
- Dynamic movement. The skier passes as close as possible to the poles.

Adaptations and Progressions

	Set Up Adaptations	Observable Cues
Bunny Rabbit Skill	Large round turns	<ul style="list-style-type: none"> • Skier can turn to either side
Jack Rabbit Skill	<ul style="list-style-type: none"> • Slalom becomes aligned with fall line • Distance between turns is reduced • Create two lines for dual cross 	<ul style="list-style-type: none"> • Skier maintains posture (mid-forefoot) throughout turn • Skier can carry speed turning either right or left • Skier can react quickly to changing directions

SDP Alignment

Bunny Rabbit Skill		<ul style="list-style-type: none"> • Falling and rising • Star turn
Jack Rabbit Skill	Level 1	<ul style="list-style-type: none"> • Free glide • Snowplow braking • Star turn
	Level 2	<ul style="list-style-type: none"> • Snowplow turn • Snowplow stop • Free glide
	Level 3	<ul style="list-style-type: none"> • Free skate • Skate turn
	Level 4	<ul style="list-style-type: none"> • Free skate • Step turn
Biathlon Bears	Grizzly Bears	<ul style="list-style-type: none"> • Downhills • Turns
Biathlon Bears	Polar Bears	<ul style="list-style-type: none"> • Technique changes • Carry momentum, skiing faster • Transitions

3. Uphill Slalom

Set Up

- Choose slight, steep, or mixed sloping terrain.
- Include undulations, bumps, hollows, and other obstacles such as trees.
- Create two parallel tracks to prevent traffic jams.
- Stakes, cones, V-boards, and markings are used to guide the skiers.
- Space between poles may vary from tight to more spaced and allow for variation of rhythm.

Technical Focus

- The uphill slalom requires technical and physical skills.
- Skiers need to "read" the terrain and direction changes.
- The skier must decide which technique to use.
- Accelerating through change of direction.
- This activity allows the skier to work on the speed of the technique and direction changes as well as coordinating both sides of the body. It can be more or less complex depending on terrain.

Adaptations and Progressions

	Set Up Adaptations	Observable Cues
Bunny Rabbit Skill	<ul style="list-style-type: none"> • Vary steepness of climb • Course changes direction relative to slope (facing right, straight up, facing left) 	<ul style="list-style-type: none"> • Side stepping • Herringbone • Skier can move across the fall line without sliding backwards • Skier is adept on both sides
Jack Rabbit Skill	<ul style="list-style-type: none"> • Moving from trackset to skierset (adventure style) terrain • Create two lines for dual cross 	<ul style="list-style-type: none"> • Skier selects appropriate technique • Skier maintains posture through different technique (posture does not move back through transitions) • Skier does not pause between techniques • Skier maintains momentum through transitions

SDP Alignment

Bunny Rabbit Skill	Climbing to new heights	<ul style="list-style-type: none"> • Side stepping • Herringbone
Jack Rabbit Skill	Level 1	<ul style="list-style-type: none"> • Diagonal stride • Side stepping • Herringbone
	Level 2	<ul style="list-style-type: none"> • Diagonal stride • Double pole • Herringbone
	Level 3	<ul style="list-style-type: none"> • Diagonal stride • Double pole • One-step double pole • Diagonal skate
	Level 4	<ul style="list-style-type: none"> • Offset

		<ul style="list-style-type: none"> • One-skate • Two-skate
Biathlon Bears	Black Bears	<ul style="list-style-type: none"> • Basic technique uphill
Biathlon Bears	Grizzly Bears	<ul style="list-style-type: none"> • Skate techniques
Biathlon Bears	Polar Bears	<ul style="list-style-type: none"> • Transitions • Technique selection • Carry speed

4. Circle

Set Up

- Circles should be between 3 and 10 metres in diameter.
- Circles and figure 8's are suitable for flat terrain.
- Slopes, bumps, and hollows make this exercise activity more difficult.
- Draw a circle on the ground by attaching a rope to a stake in the snow and drawing a circle around it.
- Cones, V-boards, and ground markings are used to guide the skiers.

Technical Focus

- The turning step is used in both techniques and allows for easy variation in speed.
- Advanced skiers are able to accelerate while performing the turning step.
- With a small radius circle, the higher the speed, the more the skier's centre of gravity will move to the inner ski.
- Figure 8 loops work both sides of the body.
- The circle forces skiers to ski as close as possible to the given radius. The skier accelerates evenly in the curve and keeps the centre of gravity up.

Adaptations and Progressions

	Set Up Adaptations	Observable Cues
Bunny Rabbit Skill	<ul style="list-style-type: none"> • Set up fairly tight radius to promote turning 	<ul style="list-style-type: none"> • Skier moves body around turn • Legs propel entire posture
Jack Rabbit Skill	<ul style="list-style-type: none"> • Set up on slope or undulating terrain (bike pump track style) • Introduce straights to promote transitions between turning and moving forward • Have pursuit type tag 	<ul style="list-style-type: none"> • Skier demonstrates greater flexion in ankle, knee, and hip to turn faster and in a tighter radius • Skier weights one ski at a time • Skier moves body into the turn while maintaining level shoulders and hips

		<ul style="list-style-type: none"> • Skier’s hands and weight remain forward
--	--	---

SDP Alignment

Bunny Rabbit Skill	Climbing to new heights	<ul style="list-style-type: none"> • Diagonal stride • Star turn
Jack Rabbit Skill	Levels 1-2	<ul style="list-style-type: none"> • Diagonal stride • Star turn
	Level 3	<ul style="list-style-type: none"> • Skate turn • Free skate
	Level 4	<ul style="list-style-type: none"> • Step turn • Free skate
Biathlon Bears	Black bears	<ul style="list-style-type: none"> • Basic ski technique flats
Biathlon Bears	Grizzly Bears	<ul style="list-style-type: none"> • Turning • Penalty loop skiing

5. Sprint Start

Set Up

- Set up one to three running tracks of different lengths depending on the performance level.
- Install a start gate to make the activity more realistic.
- Lanes should be set up to help skiers find their way around.
- Clearly mark the start and finish of the sprint with ground markings, stakes, or cones.
- Create tracks of different lengths for different ability levels and speed to allow skiers of differing abilities to race each other.

Technical Focus

- Speed and reaction time are essential for sprint race starts. With several sets of 5 second runs at full speed, skiers develop speed and improve reaction time to different start signals. As skiers age, it becomes difficult to develop and improve reaction and sprinting skills.

Adaptations and Progressions

	Set Up Adaptations	Observable Cues
Bunny Rabbit Skill	<ul style="list-style-type: none"> • Not necessary for this stage of development • Best achieved through games 	<ul style="list-style-type: none"> • Skier moves as quickly as possible
Jack Rabbit Skill	<ul style="list-style-type: none"> • Post technique of the day 	<ul style="list-style-type: none"> • Skier executes targeted technique with high speed

	<ul style="list-style-type: none"> • Ensure space for two parallel courses allowing head-to-head challenges 	while maintaining power position and power line
--	--	---

SDP Alignment

Jack Rabbit Skill	Level 1	<ul style="list-style-type: none"> • Diagonal stride
	Level 2	<ul style="list-style-type: none"> • Diagonal stride • Double pole
	Level 3	<ul style="list-style-type: none"> • Diagonal stride • Double pole • Kick double pole • Free skate
	Level 4	<ul style="list-style-type: none"> • Diagonal stride • Double pole • Kick double pole • Free skate
Biathlon Bears	Grizzly Bears	<ul style="list-style-type: none"> • Skate techniques
Biathlon Bears	Polar Bears	<ul style="list-style-type: none"> • Technique selection

6. Sprint Finish

Set Up

- Set up one to three running tracks of different lengths depending on performance level.
- Use ground markings or a finish flag to make the sprint more realistic.
- Clearly mark the start and finish of the sprint with ground markings, poles, or cones.
- Sprint lanes help the skier focus on the goal.
- Create tracks of different lengths for different ability levels and speeds to allow skiers of differing abilities to race each other.

Technical Focus

- The sprint finish consolidates technique at high speed and under full effort. All skiers should be able to modulate their speed in a sprint.
- Start at a fast pace and increase speed by taking all the steps correctly in both techniques.
- It is best to do several runs of 6-10 seconds.

Adaptations and Progressions

	Set Up Adaptations	Observable Cues
Jack Rabbit Skill	<ul style="list-style-type: none"> • Post technique of the day • Place sprint lines at varying intervals along a challenge/obstacle loop • Post an image of stretch posture across the line 	<ul style="list-style-type: none"> • Skier can perform any technique at high speed while maintaining power position and power line • Skier accelerates at appropriate moment within the course • Skier maintains top speed across the line • Skier maintains balance in stretch position (with either leg forward)

7. Technique Zone (Classic and Skate)

Set Up

- Post technique panel at appropriate locations around an adventure loop.
- Indicate a beginning and end to the zone using flags, cones, or other ground markings.

Technical Focus

- Encourage skier to employ appropriate techniques to ski speed.
- Emphasize transitions between techniques as terrain, speed and effort require.

Adaptations and Progressions

	Set Up Adaptations	Observable Cues
Jack Rabbit Skill	<ul style="list-style-type: none"> • Post specific technique recommendation intermittently along trail • Ensure that the technique will be appropriate under most circumstances (skier will be going at appropriate speed regardless of snow conditions) • Create a small loop requiring a specific challenge technique (e.g., double pole or one-skate only) • Post a challenge technique for a particular piece of terrain (e.g., 	<ul style="list-style-type: none"> • Skier applies technique while maintaining proper form and momentum • Challenges encourage skiers to develop more efficient technique • Balance, glide, and fluidity of motion • There should not be any pauses in execution of movement

	double pole as far as possible up the hill) <ul style="list-style-type: none"> • Post a stride zone challenge for a specific technique (e.g., how few strides can the skier cross the zone?) 	
Biathlon Bears	Polar Bears	<ul style="list-style-type: none"> • Technique selection • Skiing at faster speeds • Match technique to terrain

NORDIC STRATEGY

1. Stop Drop and Prone

Set Up

- The activity is done in an area off the track that skiers come into – think biathlon range.
- Line up several mats (e.g., yoga, biathlon, blue foam, etc.) side-by-side like in a biathlon range
- Ensure there is enough space for several athletes to come in, execute the movement, then leave without colliding.

Technique Focus

- Poles should be to the right side of the athlete on the mat (right handed shooter – opposite for a left handed shooter) and neatly positioned together.
- Both elbows are on the mat with arms bent at approximately 90 degrees.
- Chest is slightly off the ground. Front of pelvis is flat on the ground. Both hip bones should have equal contact with the ground.
- For a right-handed shooter the right leg is straight back, the left leg is kicked out to the left about 45-60 degrees from the right leg. Opposite for left-handed shooter.
- Sit skiers may be side lying or prone. Skiers need to learn how to best get up and down effectively.
- Both legs are straight.
- The body is completely relaxed. A good cue to relax is to imagine the body from the shoulders down to the feet is “like a sack of potatoes”.
- Get up off the mat quickly.

Adaptations and Progressions

	Set Up Adaptations	Observable Cues
Jack Rabbit Skill		
Biathlon Bears	Black Bears	<ul style="list-style-type: none"> Quickly establish correct position on the mat with body and poles
	Grizzly Bears	<ul style="list-style-type: none"> Approach the mat quickly, take poles off before mat, quickly establish correct position with body and poles Leave mat quickly and put poles back on

2. Ball Throw

Set Up

- The activity is executed in an area off the track that skiers enter into – think biathlon range.
- There should be a penalty loop – this activity is well paired with having the circle station close by and using it as the penalty loop
- The target should be placed at a distance appropriate to the age or development level.
- Ideas for throwing objects: juggling balls, small foam balls, stuffed animals, beanbags, etc.
- Ideas for targets: rings on the ground, hanging rings, cans, drink containers, a sign with a black target (as in biathlon), cones turned upside down and stuck in the snow, etc.

Technique Focus

- The ball throwing activity teaches skiers to control their breathing and reach a state of control prior to throwing; to maintain focus and attention on aiming at the target.
- Before starting the throwing activity, deliberately slow speed, adopt a stable position, and control breathing. When ready to throw full attention turns toward the target then the ball is thrown.
- Multiple throws are allowed (e.g., each skier can have five objects to throw to simulate a five shot biathlon shooting sequence).
- Set up several targets side by side to allow this activity to be included in competitions.
- Use a safety net to prevent the objects from being scattered.

Adaptations and Progressions

	Set Up Adaptations	Observable Cues
Jack Rabbit Skill		
Biathlon Bears	Black Bears	<ul style="list-style-type: none"> • Aim, breathing, follow-through
	Grizzly Bears	<ul style="list-style-type: none"> • Aim, breathing, follow-through, competition simulation

NORDIC COMBINED AND SKI JUMPING

3. Inrun

Set Up

- The slope for this activity should allow the skier to maintain speed without propulsion.
- Snow surface should be firm enough that tracks do not form through repetitive descents.
- The end of the speed run should be clearly marked and have sufficient space to brake.
- The track should be marked with poles, cones, V-boards, or markings on the ground to avoid collisions.

Technical Focus

- Encourage skiers to keep skis parallel and flat without relying on ski tracks.
- Being comfortable and balanced in an inrun position is key to a good takeoff, this will enable athletes to practice holding the position in variable conditions for longer periods.

Adaptations and Progressions

	Set Up Adaptations	Observable Cues
Jack Rabbit skill	<ul style="list-style-type: none"> • Choose uneven terrain for an additional challenge 	<ul style="list-style-type: none"> • The skier's feet, knees, hips, and shoulders should remain parallel, level and aligned (stacked) • Back should remain flat and parallel to the ground • Shin angle should be as flexed as possible while skier retains back posture and position
Ski Hopper Skill	<ul style="list-style-type: none"> • Add obstacles such as rollers, bicycle bumps, to descent 	<ul style="list-style-type: none"> • Skier maintains proper inrun position for duration of descent

4. Telemark Holds

Set-up

- The slope for this activity should allow the skier to maintain speed without propulsion.
- Snow surface should be firm enough that tracks do not form through repetitive descents.
- The end of the speed run should be clearly marked and have sufficient space to brake.
- The track should be marked with poles, cones, V-boards, or markings on the ground to avoid collisions.
- Indicate a start point (with flags, cones, v-board, etc.) a mid/switching point, and endpoint.

Technical Focus

- Encourage skiers to find a balanced telemark position they can comfortably land.
- Enforces the need for a strong foundation and balance on skis.

Adaptations and Progressions

	Set Up Adaptations	Observable Cues
Jack Rabbit Skill	<ul style="list-style-type: none"> • Chose uneven terrain to give skiers an additional challenge 	<ul style="list-style-type: none"> • Weight is distributed evenly on both feet, stacked, and skis straight and parallel • Arms are fully extended to the side and symmetrical • Upper body position remains upright, and straight
Ski Hopper Skill	<ul style="list-style-type: none"> • Switch lead foot/leg at mid-point while maintaining stable upper-body position • Alternate lead foot on each descent 	<ul style="list-style-type: none"> • Skier can hold proper telemark position for duration of descent

5. Drops Jumps

Set Up

- Select a slope that provides both a good approach and run-out for skiers to gain appropriate momentum and a gentle landing.
- A kicker or jump must be well packed and have enough time to harden before use.

Technical Focus

- The end of the speed run should be clearly marked and have sufficient space to brake.

- The track should be marked with poles, cones, V-boards, or markings on the ground to avoid collisions.
- Indicate a start point (with flags, cones, v-board, etc.) a mid/switching point and end point
- Maintaining balance inrun, takeoff, flight, and landing from the start point to the end point.

Adaptations and Progressions

	Set Up Adaptations	Observable Cues
Jack Rabbit Skill	<ul style="list-style-type: none"> • Increase size of drop or jump • Challenge athletes to attempt to go the furthest distance in the air • Challenge athletes to land in a telemark position 	<ul style="list-style-type: none"> • Skier can land in a safe and controlled manner • Balance is maintained throughout duration of drop or jump
Ski Hopper Skills	<ul style="list-style-type: none"> • Have athletes perform proper inrun, takeoff, flight, landing on the drop/jump 	<ul style="list-style-type: none"> • Skier can perform techniques while maintaining balance and control • Skier can achieve greater distances without sacrificing proper technique

RESOURCES

The following links are good examples of ski playgrounds:

- <https://www.youtube.com/watch?v=20n4GqErTVI> - Shows a course layout at the start of the video. Good example of where course marking devices become important
- [2016 Youth Olympic Games Cross Country Cross](#) - you'll need to watch a few minutes to see skiers in the obstacle and skill sections)
- <https://www.youtube.com/watch?v=yYcmHdZ-1zs>
- [FIS SnowKidz](#)
- http://issuu.com/internationaliskifederation/docs/cross_country_cross?e=8599771/3775913
- [Audi FIS SnowKidz Toolkit](#)
- [Cross country cross, Harstad 2012 - A guide to course development](#)
- [Cross country cross, Hamar 2014](#)
- [Cross Country cross at skiing day, Jutul 2014](#)
- [Cross Country Cross, Harstad 2012](#)
- [FIS SnowKidz - Cross Country Cross](#)
- [Cross-country Cross FIS 2013](#)
- [Cross-Country Skiing - Cross Free - Fill Replay | Lillehammer 2016 Youth Olympic Games](#)
- [Langrennscross HL 2014](#)
- [Snu kinahatter](#)
- [REG Agility Movie on Vimeo](#)
- [Langrennscross FIS 2013](#)
- https://www.youtube.com/watch?v=0EDew_65Lgw

APPENDIX

CROSS COUNTRY RESPONSIBILITY CODE



THERE ARE ELEMENTS OF RISK THAT COMMON SENSE AND PERSONAL AWARENESS CAN HELP REDUCE. REGARDLESS OF HOW YOU DECIDE TO USE THE TRAILS, ALWAYS SHOW COURTESY TO OTHERS. PLEASE ADHERE TO THE CODE LISTED BELOW AND SHARE WITH OTHERS THE RESPONSIBILITY FOR A SAFE OUTDOOR EXPERIENCE.

- | | |
|--|---|
| 1 <i>Always check posted trail conditions.</i> | 5 <i>Ski in control. On two-way trails descending skiers have the right-of-way.</i> |
| 2 <i>Ski in indicated direction and obey all posted signs and warnings. Keep off closed trails.</i> | 6 <i>Do not stop where you obstruct a trail or are not visible to others. Move off the track quickly if you fall or during rest stops.</i> |
| 3 <i>Always ski to right when meeting on-coming skiers and when skiing on double track.</i> | 7 <i>Do not litter. Take out what you pack in. Respect all property.</i> |
| 4 <i>Yield the track to faster skiers and skiers calling 'track'.</i> | 8 <i>Report all incidents.</i> |

**Know the Code - Be Safety Conscious
It is Your Responsibility**

