Technique standards for the Jackrabbit program

The next few pages provide details of the expected standards of technical execution associated with each of the technical awards of the Jackrabbit program, from level 1 to level 4.

While these written standards are specific to each award level, we also strongly encourage community coaches to refer to the following videos for visual cues of what to expect from jackrabbit participants by the later part of the FUNdamentals stage of development, ie towards completing the jackrabbit program.

LTAD stages	Videos with analysis	Videos without analysis
Fundamentals female 7-8 male 8-9 NB: technique videos represent expected standards for the end of the Fundamentals stage	►diagonal stride -gradual ►diagonal stride - steep ►herringbone ►double poling ►one step double poling ►offset (side | front) ►one skate ►two skate ►free skate ►downhill step turn ►tuck (side)	►diagonal stride -gradual (side | front) ►diagonal stride - steep (side | front) ►herringbone (side | front) ►double poling (side | front) ►one step double poling (side | front) ►offset (side | front) ►one skate (side | front) ►two skate (side | front) ►free skate (side) ►downhill step turn ►tuck (side)

TECHNIQUE AWARD #1

In general, poles should not be used when these skills are introduced.

Ready Position
The skier stands on flat terrain with arms slightly forward and to the side for balance. Skis are kept parallel. The body is upright, but relaxed. Knees and ankles are relaxed and slightly bent. The skier remains in this position for several seconds.

Falling and Rising
The skier glides down the hill without poles, and falls to the side and back in a sitting motion. Skis and legs are kept together. Skis are brought together, side by side and under the body, on the downhill side of the body and perpendicular to the fall line (the path a ball would take if it rolled down the hill). The skier moves on to his/her hands and knees, edges the skis and stands up with minimal or no assistance.

Side Stepping
The skier stands on the flat at the start of a packed, gentle slope with skis perpendicular to the fall line. Arms and hands are forward and to the side for balance. The skier places his/her weight on the downhill ski and then lifts the uphill ski placing it 10 to 20 cm uphill from the original position. The downhill ski is then placed beside the uphill ski. Skis are kept parallel. Repeat for five repetitions. The skier must be able to travel up the slope using five side steps.

Star Turn
This technique should be practiced and assessed on packed, flat terrain. The skier stands relaxed in the Ready Position, with skis parallel and arms away from the body for balance. The skier places his/her weight on the left ski. The skier then lifts up the right knee and places the right ski back down with the tips about 20-30 cm apart, keeping the tails together. The skis form a "pizza slice." The left ski is then moved parallel to the right ski. This is repeated until a full circle is completed. Repeat in the opposite direction. On flat terrain and packed snow, the skier can repeat the above points, but keeping the tips together and positioning the tails 20-30 cm apart.

Diagonal Stride – Running Step
In the progression of the Diagonal Stride, this step is called the "running step." It is practised and assessed on flat terrain with set tracks. The skier slides his/her skis down the track, "walking" down the track on the balls of the feet with some ankle and knee bend. There is some glide onto the forward ski as the skier pushes off. There is a "jogging-like" action on the balls of the feet, with glide onto the forward ski. After the skier's weight is shifted to the gliding ski, the pushing ski momentarily comes off the snow at the end of the push. Arms swing comfortably.

Herringbone
This technique should be practised and assessed on a gentle slope that is packed, but not too hard or icy. The skier steps up a gentle slope, alternating arms and legs. Tips are kept quite wide apart (in a "V" shape). Arms swing comfortably. The skier completes five steps with each leg.

Free Glide
This technique should be practised and assessed on a gentle downhill slope that is packed but not too hard or icy. The skier starts at the top of the hill in the Ready Position; the body is generally upright, knees and ankles are relaxed and slightly bent. Hands are kept forward. Skis are kept parallel. The skier is able to glide three metres down the slope maintaining the Ready Position.

Snowplow Braking
If the skier can demonstrate a stable Ready Position moving down a gentle slope, he/she is ready to be introduced to Snowplow Braking on a similar slope. The skier makes a wedge by spreading the tails of the skis apart (the tips come together). The skier controls speed by adjusting the size of the wedge and edging the skis. The pressure (braking) on each ski is fairly equal with minimal turning to one side. The skier maintains the upper body in the Ready Position.

TECHNIQUE AWARD #2

Poles will be used when learning/ practising some of the following skills.

Diagonal Stride – Gliding Step
In the progression of the Diagonal Stride this step is the called the "gliding step." Some glide occurs with each stride. The skier lifts the skis off the snow when kicking; there is a weight transfer about 50% of the time, and the recovery foot lands beside or in front of glide foot. The skier can perform five successful strides in a row, but balance may be insecure and unnecessary movements may occur. Poles are not yet used for propulsion, but arms move in an alternating pendulum arm action. The body is mainly upright in the Ready Position.

Herringbone
The skier steps up a moderate slope, alternating arms and legs. Tips are kept quite wide apart (in a "V" shape). The inside edge of each ski is angled into the snow to eliminate slipping. Arms swing comfortably. The pole tips are planted behind and to the side of the feet, and the hands are just below shoulder height. There is good weight transfer from ski to ski. The skier completes five steps with each leg.

Double Poling
The skier pushes down the track for five meters using only the upper body. The skier reaches his/her hands forward to plant the poles. The pole tips do not come ahead of the pole handles when they are being planted. The upper body flexes at the waist just after the poles are planted to provide additional propulsion. The upper body movement is completed by extending the arms to the rear. The legs remain fairly straight, but not rigid, through all phases of the movement.

Free Glide
Follow the steps outlined in Level 1, but this time the pole handles should be down in front of the body with the tips angled behind, so that the pole shaft is generally angled down and backward without dragging on the snow. The skier is able to glide five metres down the slope maintaining the Ready Position.

Kick Turn
Start in the Ready Position. The skier reaches back with the right arm outstretched and plants the right pole on the outside of the left ski near the tail. Both poles are now planted on the same side of the left ski. The skier stands to the right. The skier now lifts the right ski, bending at the knee and hip so the tail of the ski drags on the snow and the ski is perpendicular to the ground. Next the right leg is moved so the skis are parallel, but the tip of the one ski is beside the tail of the other. The left leg and pole are now brought around so the ski tips are together and the skier resumes the Ready Position, having completed a 180 degree turn. The skier performs the technique in both directions. At this level the skier may require some assistance.

Snowplow Stop
The skier begins by demonstrating Snowplow Braking. The skier returns to the top of the slope, then moves down the hill showing a good wedge and keeping the ski tips together. By applying equal pressure on the inside edges of the skis (rolling inward with the ankles) the skier is able to safely reduce speed to a full stop. At this level the skier may require some assistance.

Half-Snowplow Braking. The skier Free Glides down an easy to moderate hill. Part way down the skier lifts the right ski out of the track and places it in a wedge position with the tip close to the tracks and the tail farther away. Pressure is applied to the inside edge of the right ski by shifting much of the skier's weight to the ski and rolling inward on the ankle. The pressure is applied until the skier is able to significantly reduce speed. Both skis are then placed parallel in the tracks. Repeat with the left ski.

Snowplow Turn
The skier starts down the hill in a proper Snowplow position. Weight is applied unequally to the skis, so most of the body weight is placed on the right ski and the ankle is rolled inwards. This will cause the right ski to start to move perpendicular to the fall-line. The skier continues to face down the hill. After the skis turn to the left, the skier unweights the right ski and transfers the weight mainly to the left ski, while rolling the left ankle inward. The skier should be able to complete two successful turns.

TECHNIQUE AWARD #3

In general, poles should be used when learning/practising the following skills.

Diagonal Stride – Long Step
In the progression of the Diagonal Stride, this step is called the "long step". The skier shows a clear weight transfer from ski to ski resulting in a longer gliding action. The ski lifts off the snow when the skier kicks. The recovery foot usually lands beside or in front of (not behind) the gliding foot when viewed from the side. The hands are close to shoulder height and elbows are slightly bent at pole plant. The skier demonstrates some ankle and knee bend, and maintains a slightly forward body lean. The poles are angled backwards and help provide propulsion; the skier is clearly pushing off of them. Each pole is planted beside the opposite side ski boot.

Double Poling
The skier reaches the hands forward to plant the poles. When the poles are planted, the skier is leaning forward slightly, hands are forward at shoulder level, elbows are slightly bent. Poles are held at a small angle to the snow, pointing backwards. Pole tips are behind the pole handles when they are planted. The upper body flexes at the waist just after poles are planted to provide additional propulsion. As the upper body bends to a horizontal position, the arms start to extend, and follow through with a strong extension to the back. Immediately following the pole plant, the skier is obviously pushing on the poles with his/her upper body weight. The upper body movement is completed by extending the arms to the rear. The progression is upper body, then shoulders, then elbows. The elbows should not collapse in the initial phase of the pole motion. Legs remain relatively straight, but not rigid, through all phases of the movement. After completing the push, the arms and upper body are recovered forward at the same time to initiate another poling action. The skier is able to execute fairly effective poling action and push down the track using the Double Poling technique.

One-step Double Poling
The skier stands in the Ready Position with body weight on the left ski. The skier pushes off the left ski, and transfers all of the weight to the right ski, while reaching forward with the arms to Double Pole. The skier then initiates Double Poling action while recovering the push foot forward. The skier glides on both skis, and then begins the cycle again, alternating the pushing leg (this time using the right ski). The skier is able to ski 50 m using this technique. For evaluation purposes the skier needs to demonstrate some weight transfer between the pushing and gliding skis.

Free Skate
The skier is in the Ready Position demonstrating an obvious "V" shape with the skis. The skier bends the left knee and ankle, pushing off with the left leg and transferring the weight onto the right ski. The right hip and shoulder are aligned over the right ski. As the glide ski slows, the skier bends the right knee and ankle and pushes off the right ski so the weight is transferred to the left ski. The left shoulder and hip then align over the left ski. The glide on the left and right skis is consistent. During each glide, the feet come close to each other. The skier swings the arms in front of the body (rotation movement). Poles are held with the tips pointing backwards, not touching the snow.

Downhill Tuck
In a low tuck the upper body is bent to a horizontal position, and knees and ankles are bent so the thighs are parallel to snow. In a "high" tuck the knees and ankles are only slightly bent. Poles are held under the arms and tightly against the body. The skier can safely descend a medium hill in a low or high tuck.

Diagonal Skate
This technique should be practised on a moderate uphill slope. The action is similar to that used in a Herringbone, but in this case the skier glides on each ski. Alternating pushes with the arms and legs, the skier glides up the hill shifting the weight from ski to ski. A pole and the opposite ski touch the snow at the same time. The gliding skis should be kept fairly flat on the snow, and not edged until the actual push off. The arm action is similar to that used in the Diagonal Stride. Arms are kept close to the body during the initial phase of the arm push.

Kick Turn
Follow the steps outlined in Level 2, but this time no assistance should be provided to the skier.

Skate Turn
The skier performs Double Poling just in front of the place he/she wishes to turn. As the skier recovers the arms and upper body forward, the inside ski (the ski that is on the side to which the skier is turning) is unweighted, lifted and pointed in the new direction. The skier edges and pushes off the outside ski transferring the body weight to the inside ski. The skier then glides with the skis parallel and equally weighted in the new direction. Another Double Poling action completes the turn.

TECHNIQUE AWARD #4

One-step Double Poling
The skier should be able to demonstrate this technique as described in Level 3, and show a consistent fluid action with good balance at both the pole plant and the end of the pole push phase.

Free Skate
Follow the steps outlined in Level 3. There should be an obvious and complete weight transfer from ski to ski (the skier glides on one ski and then the other).

One Skate
The One Skate technique requires a poling action (arm push) with each leg push. The skier begins as if Double Poling. The weight is placed mainly on the right ski, while the left ski is lifted and angled a bit to the side. Ski tips should be kept 50 cm apart. The right hip and shoulder are over the gliding ski until the leg push is initiated. The skier plants the poles with the tips slightly ahead of the binding. The skier pushes down with the upper body and arms, beginning to transfer the weight onto the left ski. Knees and ankles bend before pushing off. The leg pushes to the side, not back, and as the ski is pushed off it remains parallel to the snow. The weight transfer is accomplished by edging and pushing off the right ski, and pushing with the arms. The completion of the poling extension is synchronized with completing the weight transfer to the left ski. As the skier shifts onto the new ski, the arms are recovered along with the right ski and the sequence is repeated using the opposite arms and legs. The glide on the left and right skis is consistent. During each glide, the feet come close to each other.

Two Skate
The Two Skate technique is similar to the One Skate except the poling action only occurs with every second leg push. The skier begins as if Double Poling, gliding with the weight on the right ski and the right shoulder and hip aligned over it. The left ski is lifted and angled a bit to the side. Ski tips should be approximately 50 cm apart. The skier plants the poles with the tips slightly ahead of the binding, and completes a Double Poling push action. As the skier pushes down with the upper body and arms, he/she begins to transfer the weight onto the left ski by pushing off with the right leg. The skier glides on the left ski, with left hip and shoulder aligned on the glide (left) ski, and begins to recover the arms forward. The skier then skates off the new glide ski (left) using only a leg push. The arms are recovered forward over the right ski in preparation for another Double Poling action after the skier has transferred the weight back to the right ski.

Step Turn
The skier starts in a "high" tuck position and glides down the hill. The skier completes several Step Turns in one direction, using small, quick steps, and consistently maintaining the tuck position. Weight is kept on the heels. During this exercise there is a complete weight transfer from one ski to the other. Skis are edged when weight shifting. The skier should be able to Step Turn both to the left and right.

Parallel Side Slipping
The skier maintains the Ready Position throughout. By moving the knees and rolling the ankles in and out, the skier shifts weight alternately on the uphill and downhill edges. Skis remain parallel while slipping down the hill sideways. The skier demonstrates control by stopping mid-slope. The skier should be able to sideslip at least one metre down the hill, and demonstrate this skill facing both directions.

Offset
This technique requires a poling action after every second leg push. The skier begins as if going to use the Two Skate technique, but the ski tips are generally a bit wider. The skier balances on the left ski and pushes with the left leg in order to step up the hill onto the right ski, planting both poles at approximately the same time (three point landing). The right shoulder and hip should be aligned over the right ski. The poles are planted in an "offset" position. The right pole is planted with a slight slant to the rear, with the tip beside the right binding. The left pole is angled more sharply back and to the side, with the tip at the left binding. The skier continues with an action similar to the Double Poling motion but with less bend at the waist. During the Double Poling action, the skating (pushing and weighted) right ski is edged and the skier pushes off with the right leg and arms to begin the weight transfer to the left ski. The skier balances briefly with the left hip and shoulder aligned over the left ski. The ski is then edged and the skier pushes off the left leg and steps and shifts the weight onto the right ski, to start the cycle again. The skier's weight shifts quickly and does not linger over the ski as it does with One Skate and Two Skate techniques. The skier must be able to offset on both sides – i.e. with right hand leading and with left hand leading.