



# PSIA-NW & SkillsQuest

## Alpine Tasks

Timberline Fall Training - 2014  
Scott Weimer – Northwest Technical Team



# SkillsQuest

## What is SkillsQuest

An assessment to promote skills as a basis of technique by providing a resource where fundamental skills can be taught, which can be measured and tracked over time with a rewards system.

- Spearheaded by Michael Rogan & Ron Kipp
- It's a instrument designed to motivate, evaluate, educate and track skiers
- Evaluated Event scaled 0-10
- Baseline 1999



# SkillsQuest

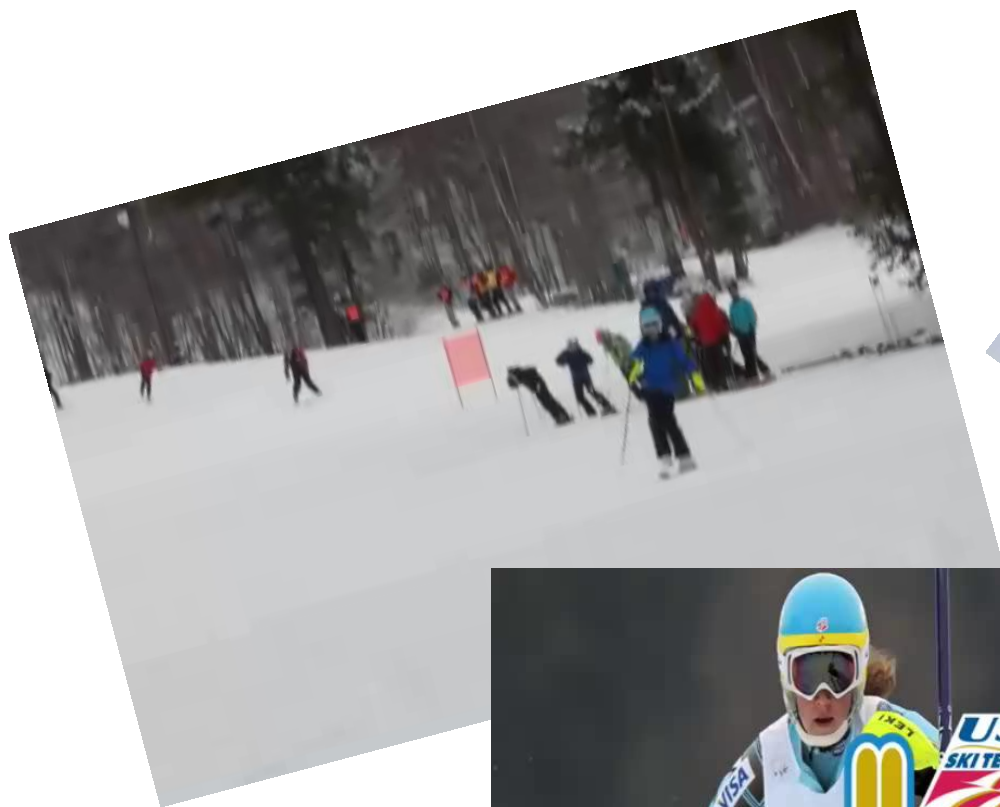
## Why

It was developed to help motivate young athletes to improve their skills. It is built on a progressive battery of drills covering each of the **fundamental skills** in skiing, which are appropriately developmentally based on age and experience in the sport.

- Developed to fulfill a need in ski racing resulting from less than optimal skill development
- National Coaching Staff reports
- To be a great ski racer you need to be a great skier
- Ski racing involves more than running gates









# Bode Miller



# FUNDAMENTAL SKILLS

## Pressure

Relates to Managing the forces acting on the skis. Skiers manage the distribution of pressure along the length of the skis, transfer pressure from one ski to the other, and adjust the overall magnitude of the force acting on the skis.

## Edging

Refers to tipping the skis relative to the length or longitudinal axis of the skis. Skiers use this action to increase or decrease the ski-to-snow angle.

## Rotary


Refers to turning the skis about the vertical axis of the body. Skiers use this action to affect the direction their skis point.

## Balance

Is both a source and outcome of effective movement.



# SKILLSQUEST ASSESSMENT TABLE

|  | Phase 1                    | Phase 2                                | Phase 3                | Phase 4                              | Phase 5                                      | Phase 6                                 |
|---|----------------------------|--|------------------------|--------------------------------------|--|---|
| <i>Pressure</i>   | Steps & jumps              | Pole jumpers                           | Pole jumpers in tuck   | Straight run in wave track           | Linked turns in wave track                   | Camel jump in wave track                |
| <i>Edging</i>   | Basic outside ski turns    | Outside ski turns                      | One ski skiing         | One ski skiing with lane changes     | One ski skiing without poles                 | One ski skiing hourglass                |
| <i>Rotary</i>   | Hockey stop                | Straight run to sideslip with edge set | Pivot slips            | Sideslip to straight run to sideslip | Hop turns                                    | Vertical brush quickness course         |
| <i>Balance</i>  | Freeski with parallel skis | Freeski with pole usage                | Freeski – lane changes | Freeski – hourglass                  | Freeski – varied terrain and snow conditions | Freeski – moguls in "V" shaped corridor |

|                    |                 |                 |                 |                 |                  |                     |
|--------------------|-----------------|-----------------|-----------------|-----------------|------------------|---------------------|
| <b>Ages</b>        | <b>2-6</b>      | <b>6-10</b>     | <b>10-14</b>    | <b>11-15</b>    | <b>12-17</b>     | <b>16 and older</b> |
| <b>Yrs. Skiing</b> | <b>1-4 yrs.</b> | <b>1-4 yrs.</b> | <b>4-8 yrs.</b> | <b>5-9 yrs.</b> | <b>6-11 yrs.</b> | <b>10 + yrs.</b>    |





# Alpine Training System



## Foundation Stage

### PHASE 1

**Biological Age**  
Pre Puberty

#### Age

2–6 years old

#### Play Age

1–4 years in sport

#### Participation

Ski around 1 day a week  
20 days a year  
At least 95% free skiing  
Play many other sports -  
gymnastics or balance-  
based sports

### PHASE 2

**Biological Age**  
Pre Puberty

#### Age

6–10 years old

#### Training Age

1–4 years in sport

#### Participation

Ski 2–3 days a week  
50 days a year  
At least 90% free skiing  
Fun races  
Play many other sports

## Pre & Post Puberty

### PHASE 3

**Biological Age**  
Pre Puberty

(Before Growth Spurt)

#### Age

Girls: 10–13: J4 (J5–J3)  
Boys: 11–14: J4 (J4–J3)

#### Training Age

4–8 years in sport

#### Participation

Ski 3–4 days a week  
70 days/year  
At least 60% free skiing  
Competition Period: (Jan.–April)  
Number of race starts: 10–15  
Ratio 1:6 (race:training)  
Play complementary sports

### PHASE 4

**Biological Age**  
Puberty

(Growth Spurt)

#### Age

Girls: 11–14: J3 (J4–J3)  
Boys: 12–15: J3 (J4–J2)

#### Training Age

5–9 years in sport

#### Participation

Ski 4–5 days a week  
100 days/year  
At least 30–50% free-skiing  
Competition Period: (Dec.–April)  
Number of race starts: 15–30  
Ratio 1:5 (race:training)  
Play complementary sports

### PHASE 5

**Biological Age**  
Post Puberty

(After Growth Spurt)

#### Age

Girls: 12–16: J3 (J4–J2)  
Boys: 14–17: J2 (J3–J1)

#### Training Age

6–11 years in sport

#### Participation

Ski 4–5 days a week  
120–140 days/year  
At least 15% free skiing  
Competition Period: (Nov.–April)  
Number of race starts: 25–max 45  
Ratio 1:4 (race:training)  
Play complementary sport

## World Class Performance Full Maturation

### PHASE 6

**Biological Age**  
Full Maturation

#### Age

Female: 16+ J2–J1  
Male: 17+ J1

#### Training Age

Minimum 10+ years in sport

#### Participation

Ski 4–5 days a week  
130–150\* days/year  
At least 10% free-skiing  
Competition Period: (Nov.–April)  
Number of race starts: 55\*  
Ratio 1:3 (race:training)  
\*based on the number  
of disciplines



## WHY ARE WE IMPORTANT



- We are usually the first person to interact with these future athletes
- We develop the beginning and bases of their experience
- Create a strong platform to work from
- Create memories










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| <b>Yrs. Skiing</b> | <b>1-4 yrs.</b> | <b>1-4 yrs.</b> | <b>4-6 yrs.</b> | <b>5-9 yrs.</b> | <b>6-11 yrs.</b> | <b>10 + yrs.</b>    |



# STEPS & JUMPS / STRAIGHT RUN HOP SKI 2 SKI

(SKILL - PRESSURE)

## STEPS & JUMPS



2-6 yrs. Old  
1-4 yrs. experience



Level II Task

# ONE SKI SKIING

## (SKILL - EDGING)



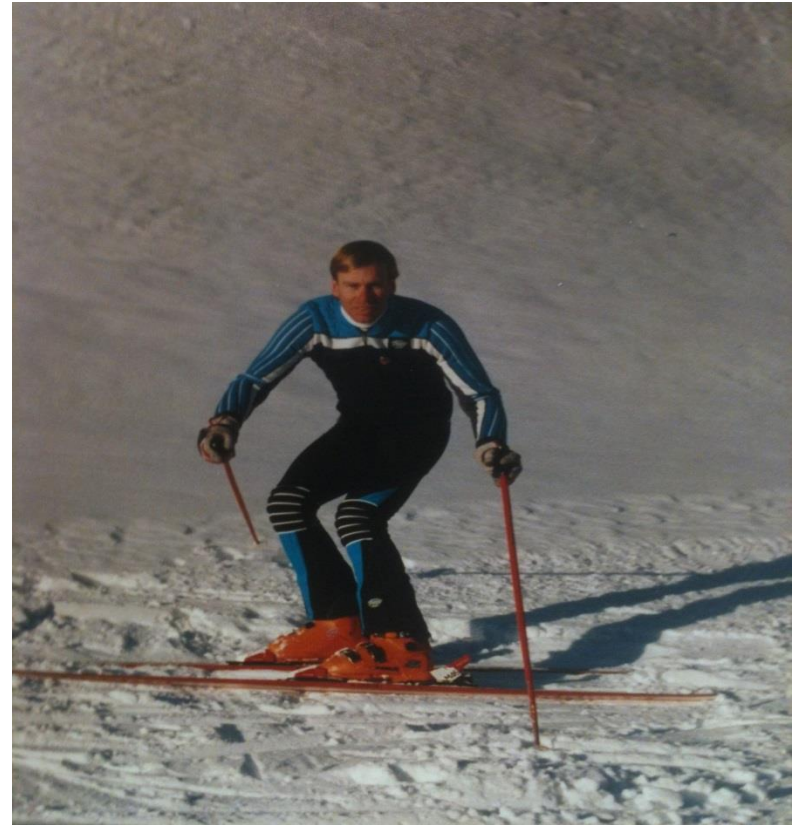
6-10 yrs. Old  
1-4 yrs. experience



Level II Task

# STRAIGHT RUN TO SIDE SLIP

## (SKILL - ROTARY)



6-10 yrs. Old  
1-4 yrs. experience



Level II Task

# PIVOT SLIPS

## (SKILL - ROTARY)



10-14 yrs. Old  
4-6 yrs. experience



Level II Task

# HOP TURNS

(SKILL - ROTARY)



12-17 yrs. Old  
6-11 yrs. experience

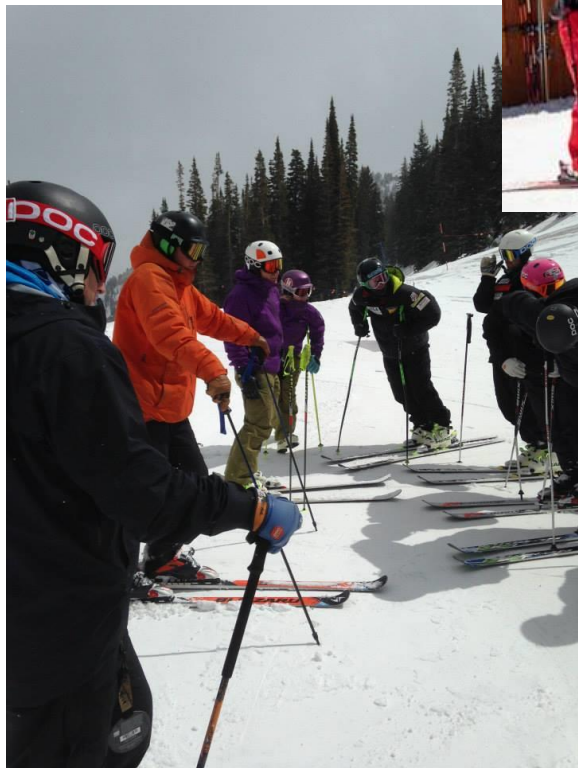


Level III Task



# COACH/INSTRUCTOR INTERACTION







# PSIA & US Ski Team

## Certification discussion





## PHASE 2

Ages 6-10  
1-4 years in sport

### Outside ski turns

**Objective:** To ski solely on the outside ski prior to, during and after the ski turn during medium radius highly carved turns connected with a traverse on one ski.

**Primary Skill:** Edging

**Justification:** The ability to ski on the outside ski is essential to optimally maintain balance against extreme external forces created by tight turn radii and high speeds. Without an inside ski to assist with lateral balance and regulate pressure the ski racer is limited to their options with regards to what they can do with the ski.

**Slope:** Easy intermediate groomed terrain.

#### Description:

- Skier makes eight carved GS radius turns with weight entirely on the outside ski
- The inside ski is kept entirely off the snow during the turn
- Skier concludes turn by remaining on the old outside ski for two ski lengths
- Skier will make an identifiable weight transfer
- Skier will initiate the new turn after a traverse of two ski lengths on the uphill (new outside) ski
- Pole may only be used to swing and touch the snow, not for balance support against the snow

#### Criteria for perfect execution:

- Inside ski carried off the snow 100% of the time
- A deliberate weight transfer can be identified when the skier transfers pressure to the new outside ski
- Prior to the turn, the new outside ski is skied for two ski lengths to indicate balance is solely on the new outside ski
- After turn completion the outside ski is skied for two ski lengths to indicate balance is still 100% outside ski dominant
- Turns are mainly carved
- Speed is consistent throughout entire maneuver
- Turn shape is relatively round
- Ski poles are kept off the snow except if used for a pole plant

#### KID-FRIENDLY START INSTRUCTIONS:

- Ski eight round, carved GS turns with all of your weight on your outside ski
- Lift the inside ski off the snow for the whole turn
- Between turns, step onto the uphill ski and lift the downhill as you traverse before you start into the turn
- Your poles are only used for pole plants, do not drag them or use them for balance
- Your speed is the same for all of the turns

#### Scoring:

Based on the description and criteria for perfect execution above, the skier will be judged on a scale from 0 to 10 where 10 is perfect demonstration of the skill and task and 0 is the inability to demonstrate the skill and task.

## OUTSIDE SKI TURNS

### KID-FRIENDLY START INSTRUCTIONS:

- Ski eight round, carved GS turns with all of your weight on your outside ski
- Lift the inside ski off the snow for the whole turn
- Between turns, step onto the uphill ski and lift the downhill as you traverse before you start into the turn
- Your poles are only used for pole plants, do not drag them or use them for balance
- Your speed is the same for all of the turns





### Pivot slips

**Objective:** To go straight down the fall-line and be able to rotate both skis simultaneously in each direction until skis are perpendicular to the fall-line with sideslips between pivots while not losing excessive speed.

**Primary Skill:** Rotary

**Justification:** Upper body and lower body separation demonstrated by rotation of the skis while maintaining a quiet upper body in space is essential for efficient ski racing.

**Slope:** Intermediate groomed terrain with a consistent fall-line.

#### Description:

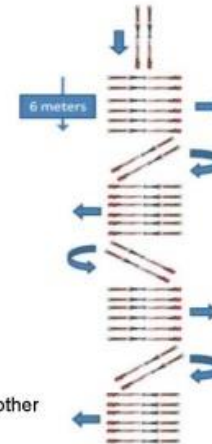
- Skier starts in a straight run down the fall-line
- Skis are maintained at hip width throughout the drill
- Skier travels 15 meters then pivots both skis across the fall-line
- Skier sideslips for six meters in a corridor down the fall-line, then pivots both skis in the opposite direction into a sideslip down the fall-line for another six meters
- Drill is concluded after the fourth sideslip, with an edge set that is timed with a pole plant and holds a stopped position for 3 seconds

#### Criteria for perfect execution:

- Skier stays within a ski-width corridor without deviation from the fall-line through entire drill
- Skis are pivoted simultaneously
- Hip width stance in all phases of the drill
- Skier loses a minimal amount of speed during the sideslips
- Pole plant coincides with edge set at conclusion of drill

#### KID-FRIENDLY START INSTRUCTIONS:

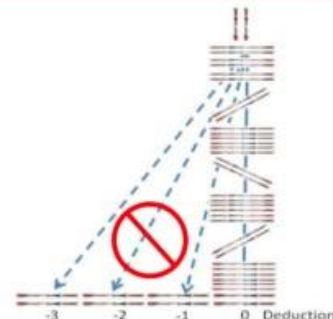
- Ski straight down the hill to get up to speed
- Then quickly pivot your skis to turn them across the hill, turning both feet sideways at the same time
- Slip sideways straight down the hill, trying not to lose much speed
- Quickly pivot your skis to turn them across the hill in the other direction followed by another sideslip
- You'll do four sideslips in all, two to each side
- Try not to lose much speed and stay in a straight line down the hill the whole time
- Keep your skis hip-width apart the whole time
- After the fourth sideslip, stop by setting your edges and planting your downhill pole
- Hold still for 3 seconds



#### Scoring:

Starting with a perfect score of 10, subtract up to:

- 5 points for stepping or sequential movement to pivot
- 1 point for every ski length outside the desired sideslip corridor throughout the task
- 1 point for not coinciding pole touch with edge set at conclusion
- 1 point for not maintaining edge set and quiet posture for 3 seconds at conclusion



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For more information and resources go to:

[www.ussa.org/alpine-programs/athletes/development/skillsquest.com](http://www.ussa.org/alpine-programs/athletes/development/skillsquest.com)

