Moguls Resource Pack

Introduction to Elementary and Turning Skills

COACHING AND DEVELOPING MOGUL SKIING ON DRY SLOPES IN THE UK

Summary

1995 saw the introduction of a competitive series of mogul (bumps) events in the UK. This circuit organised by the English Ski Council encompassed England and Wales. Scotland was not included, as there are no artificial ski slopes with moguls in Scotland. SNSC in conjunction with ESC organise Upright Aerials competitions, which are integrated into a combined Scottish/English league. SNSC organises a Scottish Moguls series on snow in addition to an Anglo/Scottish Snow Championships. Previous Scottish competitions have been featured on Grandstand.

There has been some talk of Bearsden and Hillend putting in waves or moguls however this has not come to fruition.

Until 1995 there was no real structure to bumps skiing on artificial slopes. A couple of one off events had been held at Sheffield Ski Village in the previous five years however these had not moved the sport onwards. Many artificial ski slopes have waves; a few such as Sheffield, Chatham and Stoke actually have moguls. Norfolk Ski Centre has even put in a rut line using Dendix's new flex matting. By all accounts the extra cushioning that this material provides has ensured that their rut line is the nearest thing to snow seen as yet.

In 1995 it was decided to start a series encompassing Chatham, Pontypool, Sheffield, Bromley and Stoke, with a stand alone All England Championships at Sheffield. The series was Originally known as the Grand Prix Mogul Series but would actually become known as the "Moguls Tour". The first event at Bromley attracted twelve competitors, however by the end of the series the total number that had competed had risen to well over fifty.

The numbers competing stabilised in 1996 with a slight increase year on year since then. The challenge is now to increase numbers competing to create a pool of skiers who will compete in snow competitions and provide Great Britain with an Olympic Champion.

Mogul skiing comes under the umbrella of Freestyle skiing, which also includes Acro and Inverted Aerials. In England all Freestylers have to be registered for competitions. An enigma is the reduction in the number of Freestylers registered as mogul skiing on artificial slopes gained in popularity. This is due mainly to the haemorrhaging of support for Acro skiing. Many of the once vibrant Acro clubs have become dormant losing members rapidly. Fortunately a number of dedicated coaches have stemmed this fall and the numbers competing in Acro have levelled off and in fact have increased.

As with other areas of skiing the smoking gun is firmly in the hand of snowboarding which is attracting young skiers or potential skiers with its radical attitude, fashions and seeming disrespect for authority in addition to being easy to pick up and **FUN**.

As an activity mogul skiing should and can compete with snowboarding. As a discipline in itself it is easier for the average holiday skier to talk part in and relate to. Mogul skiing is a discipline every skier participates in when skiing on snow. There is no need to set up a slalom course; any skier can find moguls of various shapes and varieties on any piste. Most skiers aspire to being able to negotiate/ski moguls; few aspire to being able to complete a slalom course. How many skiers attempt to catch air off jumps? How many BASI coaches when teaching children will find small jumps to take their class over?

We need to capture people's imagination, if we do then the sport will grow rapidly. It is fun, exciting and in many ways radical compared to the staid image of alpine. Snowboarding is attracting many of the kids that have the drive, nerve and sheer obstinacy that could make them champions. We have to offer a viable alternative in which they can express themselves and experience thrills. In many ways bump skiing must be hyped and marketed along with carving skis, blades and the like to ensure skiing is still the major snow sport in the next century.

Developing the Sport

There are a number of ways the sport can be developed and marketed. In fact it has been relatively easy to find sponsors to provide prizes for the tour. To develop it further other steps need to be taken.

Competitions on Scottish Ski Slopes

Scotland has a large population of skilled skiers, however there are no mogul or wave slopes for them to compete on. Many of the slopes in England are over six hours driving time away providing a considerable barrier to participation in competitions. Despite the distance there are regular Scottish competitors and in fact the overall Tour Champion for many years was a Scot (now selected for Britain). If competitions took place on Scottish slopes then more competitors would participate opening up the pool of skiers even higher.

As there are no moguls then competitions have been devised for these slopes to enable the facets of bump skiing that can be carried out to be tested in a competitive environment and improve the standard of these aspects. Events have included aerials competitions, Acro competitions and freeriding competitions.

Moguls skiing is scored using three criteria; quality of turns (50%), speed (25%) and air (25%). Obviously on a flat slope it is difficult to mark quality of turns and speed as they would relate to bump skiing however using ramps aerial skills can be developed and improved. Therefore upright aerials competitions can develop one specific aspect of the sport. One consideration however is the design of ramps; many slopes already have ramps for the use of snowboarders, as a general rule these are totally unsuitable for skiers as they will push the skier vertically into the air. The range of movement that a snowboarder has on landing helps prevent injury however a skier who is more restricted will suffer higher rates of knee and lower leg injuries on these ramps. The ramps used must be designed specifically for skiers and be smaller and of the “floater” type. The steepest part of the slope must also be used if at all possible.

History of Freestyle

All three disciplines of Freestyle grew out of hot-dogging; a single run would include bump skiing, aerials and Acro tricks. The first competition took place in 1971 in the USA, sponsored by K2. Awards were given for fastest run, most unique etc. Unfortunately as the awards given raised in value, the competitors tried more and more varied and dangerous manoeuvres. After a spate of injuries, including a broken back the competition was broken up into three component parts - the modern three disciplines of freestyle skiing. From that moment on inverted aerials were no longer allowed in moguls skiing.

2. Clubs

The number of dedicated Freestyle clubs in the UK can be counted on one hand. Whilst this situation persists Freestyle will not grow. Clubs are the future for the sport at grass roots level.

Clubs live and die on the dedication of coaches and the standard of coaching. Whether the coaches are BASI coaches or from the SNSC and ESC if coaches are unavailable then the clubs will not appear or flourish.

There are many skiers around the UK who currently ski the bumps at their local slopes or perhaps jump off ramps who are not receiving any coaching. These skiers may be lost to the system and if left to their own devices may become disillusioned and leave the sport. These skiers need to be placed with a coach.

Once a competitor is with a coach it is the nucleus of a club. As coaches coach Freestyle competitors, hopefully their interest will increase and they will take on more competitors. At many slopes around the country there are race clubs at which you will find a senior coach and a couple of helpers. It is these helpers who want to have their own competitors that should be targeted. It is a complaint of many competitors that they cannot find coaches.

Key to this is the SNSC / ESC moguls coaches qualification.

3. Heroes

Snowboarding magazines sales are growing rapidly and British Snowboarders names are known and revered by the readers. Photos and stories on these “riders” are regularly featured.

This does not occur in British skiing magazines. Perhaps because the age groups targeted are different and that the predominant skiing discipline, alpine racing is not as photogenic or apparently dangerous as snowboarding.

Most of the photos taken seem to be manufacturers promotional shots and feature their equipment or clothing. Most of the photos feature ski models actually jumping in the air.

Freestyle is a fantastic marketing tool. Most competitors are happy in the air and many are self-styled extreme skiers. These skiers can provide photos that are exciting and that will interest the skiing public in general. Skiing has a public relations problem - it is no longer sexy, until it is shown to be fashionable and exciting the percentage of the winter sport population taking up skiing will continue to fall.

Let us turn our skiers into personalities, like the snowboarders, to get people interested and get people into the sport. In many ways alpine has a staid image, we need to break away from this to make Freestyle the snow sport of the year 2000.

4. Training

Coaches and coaches need training to provide the expert tuition athletes of all ages need. The Canadians have a moguls coaching qualification, the SNSC carried out a weekend performance course and the ESC had an add on module for teaching ASSI coaches how to coach moguls. The latter is the only available course in the UK and has a number of faults.

The SNSC/ESC Moguls coach award addresses the needs of club athletes to enable their progression to national squad standard. At the end of the course the candidates will be able to coach beginner moguls skiers to a level where they can confidently compete in nationally organised plastic and snow competitions.

5. Ex -Racers

For many different reasons skiers who regularly compete in the more traditional disciplines will give up racing. This may be through injury, boredom, personality clashes or any of a myriad other reasons. These skiers where possible should be persuaded to train and compete in moguls. The hard Olympic facts are that the majority of the top 16 in the men's final at Nagano were ex racers or had been through race foundation training. Johnny Moseley the eventual winner, although carrying out two excellent aerial combinations won due to his solid run with excellent ski snow contact, he too was an ex racer.

Finland had three competitors in the top ten.

Basic Manual

Course Content

This resource pack concentrates on the following areas:

1. Safety - risk assessment
2. Assessment of ability
3. Introduction to elementary skills
4. Foundation Training
5. Introduction to skiing the waves
6. Introduction to skiing moguls
7. Developing skill - improving technique, varying skills
8. Further development
9. Posture
10. Leg Movement
11. Leg Lead
12. Jumping
13. Ramps
14. Fit for Moguls
15. Water Ramps
16. Trampolining
17. Use of Video
18. Teaching children
19. Race Training

Appendix

1. Safety - risk assessment

Mogul skiing is an aggressive and stressful routine of skiing. Before starting the coach must ensure the risk of injury to the athlete is minimised.

1.1 Injuries/ Illness

Initially the coach must ensure they are aware of:

- Any injuries the athlete may have
- Any illness the athlete may be suffering from such as asthma, diabetes, epilepsy, heart conditions etc.

These may be perceived as personal questions however they must be asked. If not they can put the athlete at risk if the coach cannot react to any given situation and may also leave the coach open to legal action if such an incident occurs.

When asking ensure it is in a polite and considerate way, always offer the option to the athletes that they can tell the coach in private but stress the importance of the coach knowing such information.

If in the coaches opinion the athletes are at risk because of any injuries or illness then it is the coach's responsibility to ensure the athlete is aware of any risks they are running.

1.2 Warming Up

Everyone including coaches should warm up and stretch properly before participating in skiing. Spend time warming up and going through a full stretch routine. This is very important in a structured coaching session of high level athletes who will be pushing themselves to the limit. The risk of injury will be reduced by a large amount. At the end of the session lead a warm down and stretch routine. Work in the last ten years has indicated that many of the more commonly used stretching routines can cause damage (make sure you are ware of which exercises are appropriate). It is also recommended that the coach attends a course (such as those run by the National Coaching Foundation) or reference be made to books. Ballistic stretching should not be used.

Advise athletes that you expect them to warm up and stretch as appropriate before the session. This can be carried out with those being coached on a regular basis. **However,** it is recommended that the coach always carry out a basic warm up and stretch.

Two runs down a small flat slope is not a sufficient warm up.

1.3 Slope

It is the coaches responsibility to assess the condition of the slope before taking athletes down any runs. Check for any debris on the slopes, matting that is not fixed firmly, any holes under the matting or any other situation that may cause problems. If any problems are encountered then the coach must notify the relevant authority (such as ski patrol) to ensure any necessary repairs are carried out before skiing down the problem slope.

2. Assessment of ability

The most important phase is the initial assessment of ability, ingrained habits may prevent the skier from learning how to ski moguls quickly.

- Ask athletes to take a couple of runs down a flat slope, assess their ability. Upper body rotation, sitting back etc. will cause even more problems than usual in the bumps
- Ask the athletes what their objectives are - are they realistic? If not discuss and set reasonable objectives for the session

- Look at short radius turns, are they effective? How many turns can they get in every couple of meters?

- If the standard is poor then foundation training may be more appropriate than a mogul session, this option could be offered to the athlete

- Foundation training should be included as a matter of course in all sessions. Flat work is fundamental to the good basic technique required for efficient bump skiing

3. Foundation Training

This section is incomplete - more text will be added later

Foundation training is essential for the progression of every skier. Basic good technique is the "foundation" on which all good mogul skiing is built.

The "Central Theme" provides a framework for developing skiing skill.

The Central Theme is broken down into four families, known as the fundamental elements.

Body Management

Posture and balance

Agility

Co-ordination and rhythm

Steering

Pressure control

Edge control

Control of rotation

Control

Of speed

Of line

Adjustments

For snow (change of matting type, condition or dryness)

For terrain (flat, mogul, waves etc)

All of these should be addressed in foundation work.

Some examples of appropriate exercises for developing moguls skiing on the flat are:

- Very quick skiddy parallel turns, variation - hold poles level horizontal in front with first two fingers of each hand

- Pole planting, punching hands forwards after every plant

- Bending and flexing exercises - focused on the lower leg and looking at pressure on the toes

- Exercises to find centre of ski; jumping, short swings etc.

- Edge control - galloping short swings, charleston etc

Good mogul skiers must be able to carve with the efficiency of a top alpine racer. A moguls session must be carefully constructed to include the above flat work and translation of the exercises into the moguls. The fundamental elements should be addressed in each session.

Improving a skier's technique on the flat and in the bumps is not mutually exclusive.

4. Introduction to elementary skills

Absorbing, pivoting and pole planting are very important skills. These can be developed outside the moguls and waves on undulating terrain.

Areas available are:

- Small rollers or humps - approximately 30 cm in height
- Camel bumps

Exercises - can be carried out in snow plough or parallel

- Absorbing, pulling knees into chest as athlete skis over top of terrain obstacle
- Absorbing and pivoting on top of obstacle
- Pole planting, again concentrating on keeping hands and arms in front of body and punching poles forward

Key points:

- Keeping body still with legs flexing and straightening to smooth out terrain.
- Retaining posture
- Still upper body, facing down fall line

In essence we are looking at good skiing posture and efficient use of the skis. Many of the top mogul skiers are ex-racers. In the bumps the skis still have to be turned efficiently and good ski - surface contact maintained.

5. Introduction to skiing waves

Skiing waves is an extension of using the other terrain features. Exercises on waves are a repeat and progression of the exercises carried out on flat terrain.

Depending on the level most of the following exercises can be carried out in snowplough or parallel:

- Straight line snow ploughing, concentrating on absorbing
- Introducing turning, again concentrating on absorption on top of bump and straightening in troughs
- Introduction of pole plant

At this stage it is important to begin teaching the fundamental skills that will stay with the athlete throughout their competitive career. The centre of mass should always remain balance over the centre of their feet - the feet should remain primarily under the body. As the bump/wave is absorbed the lower leg/shin should flex forward in the boot to primarily absorb the forces created. As the bumps increase in size then further forces are absorbed through the upper leg and hips - again mass should remain central with a still and relatively upright upper body.

How do we keep the feet central and under the body? Feet can be pulled back in a smooth motion, alternatively the hips can be projected forward.

Key points

- In parallel using analogy of pedalling a bike backwards, pushing down on toes to keep tips of skis down
- Skidding into back of wave and squashing, "like a sack of potatoes"
- Hockey stop into back of wave
- Pivoting on top of bump in a flexed position - rotating feet under body
- Planting pole just over the top of wave. Punching hands forwards to ensure hands and arms stay in front of body

Absorbing the bumps: the legs should flex to smooth out undulations giving the body a quiet, almost level ride. It will help if the athlete imagines balancing a book on their head or carrying a tray of glasses. Pay attention to the pressure under their feet - they should try to keep it constant. Focus on something ahead so that their eyes remain steady. If they keep looking at a mogul or wave as they approach it their eyes will drop and perhaps lead to excessive bending at the waist. Exercises like this help to keep the upper body quite.

As the athlete reaches the top of each mogul/wave they should breath out forcibly.

Control of speed is essential and should be taught as early as possible. Remember also skiing skill should be developed outside of bumps simultaneously to ensure smooth improvement.

6. Introduction to skiing moguls

The coach should only allow the athletes onto bumps when they are satisfied they are ready, **do not** let yourself be bullied by the athlete.

For first time introduction to the bumps it is often most appropriate to enter part way up on a bumps slope. Ask them to straight run the last one or two bumps absorbing and straightening - only do this if you believe the athlete is capable of this exercise. Repeat from the same point turning in the hollows, concentrate on skills learned in waves (if appropriate). When satisfied move up a row and repeat turning exercises. Vary by turning in hollows, on top of bumps etc.

When step change nearest bottom is reached and coach is comfortable with ability of athlete then can move to top.

When skiing from top then the following options may be used:

- Traversing across slope and turning near edge
- Turning anywhere on bump, controlling speed
- Skiing rutline - using back of bump to control speed

Key points

- "Squashing like a sack of potatoes"
- Pole plant just before bump - pushing forward to keep in front of body
- Slide, edge check, absorption and pivot
- Pull feet back or project hips forward.

Fundamentals are still posture, technique and rhythm. However, changes to equipment such as shorter skis and poles can aid learning.

7. Developing skill - improving technique, varying skills

Skill can be further developed concentrating on criteria that are important when skiing in mogul competitions. Exercises used in developing basic skills are still appropriate, as is foundation training.

The following exercises can be used to develop the skills of advanced bump skiers:

- GS'ing the bumps
- Staircasing
- Skiing as slow as you can retaining parallel turns and posture
- Skiing without poles
- Skiing on one ski
- Runs straight through
- Introduction to jumping
- Plant poles in hollows and on top of bumps. Plant poles and turn when "I shout". - always turn when poles are planted.
- Double pole plant
- Double turns

8. Developing skill - improving technique, varying skills

Exercises in the bumps should develop;

Speed of action

Balance

Agility

Posture

Choice of line

Position of turn

9. Posture

There is a misconception that bump skiers sit back and wiggle their rears, this could not be further from the truth. Mogul skiers have to be able to carve effectively even whilst rapidly flexing and stretching to absorb the bumps and hollows (ruts). To do so the skier must stand in the centre of the ski, on the sweet spot. The posture required is a little different from that of Alpine racers.

The upper body is relatively straight with a small curve to prevent hollowing of the back. The pelvic tilt is quite pronounced upwards & the arms are pushed forward to create a square box. Flex comes wholly from the lower body: to maintain a central stance any flex in the ankles must be compensated for in the hips whilst maintaining the still body. The body is fixed in position always facing directly down the fall line.

10. Leg Movement

The position is dependant on the degree of foot rotation for top bump skiers the feet will remain largely under the body dependant on the arc of the turn - these will take a more direct line through the rut.

The type of turn a bump skier makes is dependant on gradient and size of bumps. On a flatter slope with small bumps the turns should be short sections of long arcs. As the bumps increase in size then speed begins to become a factor that must be controlled more effectively. To keep the upper body steady the legs will begin to work through a larger range of movement at a more rapid rate. Absorption into the back of the bump can be used to slow the skier. As the slope steepens and bumps get ever bigger then a greater range of foot rotation is required (the arcs begin to become rounder) however the skis should still be edged effectively.

For beginner bump skiers they will want to control their speed effectively and so the skis are more likely to follow the longer line of the rut and hence the feet will move through more of a curve. It is essential that if this is the case that body position facing down the hill is maintained.

The best bump skiers will maintain short sections of longer arcs and use their speed of action, fitness/strength and balance to cope with the inherent speed of this activity.

11. Leg Lead

Leg lead is the technique whereby the uphill ski is advanced forward by anything up to 6 inches to help maintain a "down the hill" body position. The turning ski can also be edged though the movement of the none turning ski is limited. This leads to the turning skis knee being tucked behind the none turning skis knee. At the initiation of each turn the lead is switched. This technique will result in an A frame if the feet are kept apart however in a close stance this is less apparent. This technique is commonly taught in the USA and has proven to be effective however be careful of its use as it can lead to some exaggerated and contorted body positions. Remember Moguls technique should reflect the ideal mechanical positions to achieve the shapes and turns required by the judging criteria.

12. Jumping

12.1. Teaching Air

Everybody jumps on skis. Those that say no are in 99.9% of cases lying. We use it to change direction quickly, avoid rocks/ debris etc. Most importantly we often use it just for fun.

"It is therefore easy to modify it so that athletes can perform big airs in perfect shapes"

Unfortunately this is not the case. Jumping (effectively) is complex and involves body, mind and heart.

To perform upright manouvers the athlete needs to be stable on take off, provide lift, have a stable central axis and land in control absorbing the forces generated by their jump (these can be considerable depending on the height of the jump).

We can break the jump down into various phases.

12.2. Transition

The transition is the point from the last mogul to the start of the upslope of the jump.

It is important to enter the transition at such a speed that the aerial manouver can be carried out in control, safely with sufficient height and that on landing forces can be absorbed and the skier can continue in control.

Too much speed means loss of control and possible break out of the rut line on landing. The best way to control speed prior to the transition is wider rotation of the skis in the turn or absorption into the back of the bump. Beware snowploughing will be penalised!

Conversely, too little speed may result in an incomplete manouver or a fall off of the lip of the jump.

The transition should be negotiated with weight central, hands pushed forwards, legs slightly flexed (though not excessively) and upper back slightly flexed or straight.

12.3. Take Off

Take off or the "Pop"

Take off is when the toes are approx. 6" from the end of the ramp and should be completed before the toes have passed over the end of the ramp. Arms are kept in front and pushed upwards to help provide lift - however most important of all is the leg action.

Legs should be flexed, on take off they are stretched rapidly to provide upwards movement. This is done in conjunction with the arms. The jump should be made vertical to gravity and symmetrically to provide a strong central position.

From this strong core position various "airs" can be initiated.

12.4. Landing

On landing the legs impact the ground in with a very slight flex (to ensure legs are not locked out). The arms are stretched forwards. The position adapted to resist the force of impact is dependant on the height of the jump and importantly the strength of the skier.

As the skier lands and absorbs, it is essential to keep the weight central and hands pushed frwards. This maitains the "bumps" stance and allows the skier to immediately ski into the next bump. The closer to this core position , the better able the skier is to contine (the faster the recovery time from the jump). In addition a very low position can force the skier backwards onto their heels and hence lose control.

12.5. Four/ Six Point Take Offs and Landings

These are a variation of take off & landing and can aid stability. Formerly these were used by most bump skiers. New skool tricks and increase in height have made these redundant for many World Cup skiers.

12.5.1. Four / Six Point Take Off

Both poles are planted at the top of the jump on take off (2 skis and 2 poles = 4 points). The arms are then pushed upwards in front of the body (a further 2 points giving a total of six points). This creates a solid position on take off. But… can create timing problems, often reduces lift and inhibits rotational manouvers.

12.5.2. Four Point Landing

As the athlete comes into land, the poles are planted to either side of the tips (again 2 skis and 2 poles = 4 points). The poles are used to support the body to prevent collapsing and create a stable position

13. Ramps

Ramps are an integral part of Mogul skiing on dry slopes. Ramps suitable for snowboarding can often be dangerous for skiers. It is the coaches responsibility to carry out a risk assessment on each ramp prior to use. This should include condition, stability and uplift. Kickers should be avoided. All take offs should be straight i.e. with no upwards curve to them. The height of ramps used is dependant on the steepness of landing - flat landings must be avoided at all times.

13.1. Small Ramps (Rampettes)

The use of small ramps reduces the risk of injury from flat landings and is a useful way of introducing atheletes to jumping. Considerably more effort must be used on small ramps to gain height - this helps to positively develop the pop in a safe way. Many of the elementary airs can be simply and safely practiced this way.

14. Fit For Moguls

Plastic slope competitions last for a maximum of 18 seconds for the fast competitors, on snow this is elongated out to 30 or more seconds. From this we can see Mogul skiing is an anaerobic activity.

In training each run may be interspersed with a few minutes on the lift and on snow a number of minutes skiing (aerobically) to the competition piste.

As in the majority of anaerobic sports a strong physique is required to resist and apply the forces required or experienced in a moguls run. The physique is more male Gymnast than sprinter requiring power and flexibility.

14.1. Fit for Skiing Moguls

The ideal posture is to retain a strong still upper body whilst the legs work independently flexing and stretching. It is essential to have a strong body core with extremely well developed stomach and lower back musculature.

Not only does this help maintain the body position it supports the back reducing damage. Extensive time must be spent in the gym working on sit -ups, sideways plank, plank, side sit-ups etc

Strong shoulders and arms are required for the positive pole plant. However the pole plant is rapid so weight work should not merely focus on building strength but also of increasing speed. Racquet sports involving eye-hand coordination and fast arm action are useful for cross training.

The legs need to be able to move rapidly applying forces timed in milliseconds to maintain foot - snow contact at speed. They also need to be strong to prevent collapsing. Leg exercises are discussed in the jumping section.

14.2 Fit for Jumping

Power (force x time) is required in the legs to push the athlete into the air. Someone who is strong may be able to bench press large weights with their legs but only jump a small distance into the air. The most effective jumpers are those that can apply reasonable force rapidly - this will provide most lift. Exercises should therefore focus on rapid knee jumps, contact broad jumps, skipping etc. When landing after a jump the athlete experiences the most forces in the run. This is where again core strength is very important to maintain an upright stance whilst absorbing the landing with the minimal amount of compression. Here pure strength in the legs is also required hence basic leg weight work is required.

The complex aerial moves require excellent all round flexibility. Athletes have been known to concentrate on leg flexibility to the detriment of upper body. This is a false economy as to balance the leg shapes the upper body has to adopt poses to keep mass central and controlled. Therefore every gym session should have at least 10 minutes set aside for stretching. Of course it should be part of every programme anyway to reduce the risk of injury. A good daffy requires the athlete to perform the splits as do the best Cossacks.

15. Trampolining

Trampolining is an ideal method for improving balance and maneuverability in the air whilst practicing the "airs" required for moguls and "New Skool" competitions. It is not necessary to initially use boots and skis. Most practice can be carried out in a Trampolining club environment. The club will often be happy to help with ski specific maneuvers, though some have Trampolining equivalents e.g. spread =

straddle, zudnik = pike etc. Once confidence has been reached in carrying out the basic maneuvers barefoot then boots and skis can be introduced.

All top competitive skiers use trampoline work extensively. Shorter skis are used (150 cm or less) than in normal competition. The edges of the skis are taped to prevent damage to the trampoline bed. Generally older trampolines are used - clubs tend not to like their best competition beds to be used for ski work. The big advantage to trampoline work is that tricks can be practiced repetitively to perfection in a short time. This can be the coaches biggest aid to teaching aerials.

Always ensure a properly qualified trampolining instructor is present for practice sessions.

16. Water Ramps

Water ramps enable the athlete to practice transition, takeoff and air in relative safety and is extremely useful for teaching more "hairy" tricks.

Shorter (165 / 160 cm) skis are generally used though longer skis can be used by the more competent athletes. It is recommended that complex new tricks are practiced on a trampoline prior to the water ramp. Additionally tricks that the athlete can perform may be improved or pushed to the limit as well as modified to include "New Skool" shapes.

A qualified water ramp coach should be used at all sessions.

17. Use of Video

Video can be an extremely useful tool in fault analysis. Not only does it allow immediate visual feedback for the athlete, it also allows footage to be taken away for further study by the coach (slow motion is extremely useful) and provides a record of improvement.

When shooting video use shots from various angles also vary from close up (to identify specific areas) to a broader viewpoint. If possible watch the video prior to showing the athlete to make clear in your mind the points you want to make. try and identify one specific point to work on and don't get sidetracked by other less important issues.

Importantly do not let the video become the coach. Use sparingly in practice(once every five to six weeks) and if possible illustrate improvement by comparison to past video footage.

If possible film competition for a debrief of the event. As always accentuate the positives but use the video to identify areas for improvement by the next competition - make sure lessons are learned.

18. Teaching children

Children can be introduced to the bumps at an earlier stage than adults. Similar exercises can be used as adults but should be introduced through games. Children because of their size in relation to the moguls can be introduced at a snow plough standard however the same skills should still be taught. The coach should concentrate on rut line skiing at an early a stage possible.

19. Race Training

Skilled bump skiing is built on the firm foundation of good technique. For longer term coaching it is recommended that elements of race foundation training be introduced into the programme or that the athlete be advised to carry out race training in some form with another coach. In competitions turn judges mark smooth; efficient carved turns most highly along with good ski surface contact.

20. Types of Air

Spread

Twister

Cossack

Zudnik

Daffy

Heli or 360

Back scratcher

Iron cross

Grabs

Appendix

The following refers to beginners but can equaly apply to more experienced skiers

Teaching Background

Why are they here?

Why are beginners want to learn to ski?

We have five main types of beginner:

1. Those who are going on holiday and wish to learn how to ski before they go. These will be either hooked or turned off by their holiday experiences. With these we need to ensure that they return to the Village after their holidays or that they progress onto intermediate courses before they leave - these are probably the easiest beginners to retain for the length of the beginners courses but the hardest to encourage to return for lessons after their holidays.

2. Those that have always wanted to try skiing but have not had the opportunity to try it on snow. These are some of the most enthusiastic beginners and should be cherished - they are likely to become fanatical plastic skiers if nurtured.

3. Those that have been given a lesson as a present or are there with a birthday party - these are likely to be children.

4. Children that have been brought by their parents. These need to be kept happy so that they want to return.

5. Those that are there for their partners - these are the hardest to retain as their motivation is likely to be the lowest.

In all of these cases fun is the key issue to get them to return however we must always be safe. We therefore need to **SEL** the skiing experience. That is **S**afety-**E**njoyment-**L**earning.

– We must always take safety as our first priority, so consider what you are doing:

– Is the beginner able to participate in the lesson (health etc.)?

– Where are you going to teach the lesson?

– Is the matting safe (have you checked?)?

– Can the beginners safely carry out the exercises you propose?

– Are they ready to progress further up the hill onto another slope? - too soon and their safety compromised and confidence damaged.

– Are their boots comfortable - badly fitting boots can put them off for good

– Are they falling over too much? (ease off - they may be fatigued or the tasks you are setting could be too difficult)

How are they feeling?

It is probably a long time since you first put on a pair of ski boots. Many instructors forget what it is like to learn how to ski. Each person is unique, with differing levels of confidence, fitness and intrinsic ability.

Remember!

– They will be unfamiliar with their surroundings and may feel a little reserved

– They may fear injury or ridicule if they cannot perform as well as others

– They may feel uptight or stressed if they arrived late or did not realise how long it would take to be processed through reception and the boot room

– They may be there under duress (their partner may have "pushed" them into it)

– They may be pressured by their peers (keen to "show off" or be overzealous)

– They will tire at different rates which will affect their mood, ability and increase the risk of injury

However!! - ENJOYMENT

Don't forget the reasons why they are here - in the majority of cases if you make the lesson fun and exciting they will return.

Employ maximum class activity

– No one wants to stand around listening to long-winded explanations by instructors proving how god-like they are because of their knowledge of skiing. If your class spends more time looking at other groups, skiers you have lost their interest.

– Involve the beginners in the lesson - make them feel part of the learning process.

– Get them interested - there is no fixed way to do this, each teacher has their own strengths, build on these

– This is where you capture people for life. You are probably their first experience of skiing.

– Set realistic targets within the lesson, there's no point telling a class of pensioners they will be snowploughing at the end of their first one and a half hours skiing. Although this is possible for many it is an unrealistic target. For their first lesson, a realistic target for most people is straight running in a basic stance and being able to hold a snowplough position for some period of time (remember the SSV lesson structures - these are your goals for the majority of beginners).

Ensure practice does not become boring, one hour of straight running is not necessary if beginners are comfortable and well balanced on their skis.

And very important, offer lots of encouragement; clap, verbal feedback (i.e. "that was brilliant") etc.

The EDICT Model

The EDICT Model is:

- Explain - what is it you are doing?
- Demonstration - show them what you are aiming for, you could use a skilful class member.
- Imitation - let the beginner try it
- Correction - give them positive feedback on how they can improve
- Trials - let them practice and experiment

If necessary repeat the process.

Debrief

Advice - what next?

At the end of the lesson it is important to debrief your clients.

They need to know:

– How well they have done - always be positive even if they need to take the same class again

– What the next lesson is

– What they will learn in their next lesson

– Remind them that after all of the beginner lessons they will be proficient

– That although the first lesson was fun it will also always get easier

– You might want to tell them that you were just like them on your first lesson and how much joy and achievement they can get from skiing

– And, importantly, tell them how they can book their next lesson

– Finally. Ask them if they would like to join you again

Goal Setting

Fitness Training

Motivating the Athlete

Recommended reading

"The BASI Manual", British Association of Ski Instructors, Glenmore, Aviemore, Inverness-shire, Scotland, UK PH22 1QU

"Skilful Skiing", John Shedden, EP Publishing, 1982; ISBN 0-715808-00-1

"Skiing - Developing Your Skill", John Shedden, Crowood Press, 1987; ISBN 1-852230-94-0

Important contacts

British Association of Ski Instructors Glenmore, Aviemore, Inverness-shire, Scotland, UK PH22 1QU. Tel 0147 986 1717 E Mail - basi@basi.org.uk

Scottish National Ski Council, Hillend, Biggar Road, Midlothian, EH10 7EF. Tel 0131 445 4151

English Ski Council, Area Library Building, Queensway Mall, The Cornbow, Halesowen, B63 4AJ. Tel 0121 501 2314

Sheffield Ski Village, Vale Road, Parkwood Springs, Sheffield. Tel 01142 769459/811818

British Association of Ski Patrollers, Lorn Drive, Glencoe, Argyll, PA39 4HR. Tel 01855 811 443