

L1 + L2 SKI INSTRUCTOR REFERENCE MANUAL & PRE-READING

Version 1.1 Updated: 29/09/21

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INTRODUCTION

This Instructor Reference Book is designed to support the UK Snowsport Instructor courses by providing more in depth understanding of the course content, models and the theory behind instructing and learning.

CONTEN	ITS	PAGE
1)	The Skiing Spectrum	03
2)	Skiing Fundamentals	05
3)	The TPO Models	07
4)	The Instructing Loop	12
5)	Communication Skills	14
6)	Feedback & Learning Preferences (VAK)	18
7)	Teaching Styles	23
8)	TTPPEE (EEPPTT)	26
9)	Motor Learning	30
10)	Skills Development	34
11)	FIS Code of Conduct	36
12)	Bibliography & Further Reading	37



THE SKIING SPECTRUM

The UK Snowsport Skiing Spectrum is a system of progression which guides the learners towards becoming competent skiers. It matches the accepted pathway found in the majority of snowsport nations and covers the range of activities most skiers will engage in during their learning progression.



Below is a brief description of each stage of the Skiing Spectrum:

Introductory Activities

These are in effect the first movements that your learner's make on their skis and even before that include getting familiar with the equipment. These activities should ideally take place on a flat area where your learners can move around safely without the fear of sliding away! Good terrain choice is vital.

<u>Sliding</u>

This involves sliding or straight running with a run out so that the terrain controls the speed. So once again the terrain choice is very important. The goal here is to develop confidence and balance whilst sliding. If your learners are falling regularly then the tasks you are setting may be too difficult.

<u>Gliding</u>

This refers to gliding or descending the hill with the skis in a plough shape. The goal here is to be able to descend at a constant controlled speed while keeping a similar sized plough. However, you may also wish to develop your learners through changing the plough size in order to speed up or slow down, but the emphasis must remain of turning the legs/feet to form the plough rather than pushing out the tails of the skis.



Snowplough Turns

This is the first turning phase within the skiing spectrum. The goal here is to develop your learner's ability to turn on easy terrain while focusing on using turn shape to control the speed. The plough size should be small with the inside ski fairly flat. This makes the transition to plough parallel much easier.

Plough Parallel Turns

In this phase of the learner's development the goal is to allow the skis to be steered parallel for some of the turn. This involves **matching** the inside ski parallel to the outside ski. Initially this will be late in the arc, but as the learner develops this will become earlier and earlier. This should be a natural consequence of moving onto slightly steeper terrain combined with developing the skill of skidding (side-slipping practice helps this).

Parallel Turns

To be a true parallel turn both skis should remain parallel throughout the arc. This involves turning both legs/feet simultaneously. Typically a learner who can achieve this on easy terrain will revert back to plough parallel on steeper terrain until their skills are developed further.

Dynamic Parallel Turns

The term dynamic refers to the ability to make parallel turns in a variety of corridor widths and on varying degrees of steepness on pisted terrain. The learner here will typically be more skilful at blending the steering elements of edge, pressure and rotation.

Mountain Skills

These are skills that are not only useful for broadening the learner's skill set but are also vital for being able to tackle more terrain on the mountain. Mountain Skills include, side-slipping, traversing, garlands and swing (or turn) to the hill. Of all these skills side-slipping is one of the most vital to develop in your learners as it helps with tackling steeper terrain and can be blended into the end of the turn to help brush off speed.

One of the key aspects of Mountain Skills within the Skiing Spectrum is that the skills can be introduced from the Snowplough Turning stage and then continually developed right the way through the spectrum.

SKIING FUNDAMENTALS



The skiing fundamentals are the same elements that are contained in the TPO models and are the skills that need to be developed in order to help learner's progress through the skiing spectrum. What follows is a brief description of each of these elements. For those who want a more in depth understanding please refer to the further reading highlighted at the end of this section.

<u>Posture</u>

This refers to how our body is stacked above our skis/feet. Effective posture means that there is functional skeletal alignment so that while you ski you are supported by your bones rather than your muscles.

To achieve the above the skiers should be flexed at the ankles, knees and hips. Have a slightly rounded back with the pelvis tilted upwards. Hands in vision with daylight between the arms and the body. And finally, a horizontal eye line.

Balance

Balancing is a crucial part of many sports and particularly in skiing where you have to deal with balancing while in motion and while moving over undulating and changing terrain. Balance can be broken down into fore and aft balance (forwards & backwards) and lateral balance (side to side).

<u>Separation</u>

This refers to how the upper and lower body interact whilst making turns. Separation occurs in order to maintain effective balance against the outside ski of the turn and so that the skier is ready and able to move effortlessly into the next turn.

Rotational Separation means that the legs and skis turn more than the upper body. This typically becomes more obvious whilst skiing narrower corridors when the skis are being turned well past the fall line.

Lateral Separation occurs in order to allow for good balance and pressure control on the outside ski of the turn and is more evident later in the arc. The focus here is on keeping both hands level and a vertical zip line.

Rotation

In this context 'rotation' is one of the elements we use to steer the skis. Other useful terms for this movement are pivoting or twisting. Learners should be encouraged to make the pivot point under the foot. Blending rotation into a turn helps to make smooth arcs and control the speed with skidding.

<u>Edge</u>

In simple terms edging is about tilting your skis. And it should be thought of as both increasing and decreasing tilt or angle of the skis. More edge angle will result in increased speed whilst less edge angle allows the skis to skid or sideslip, hence control speed.



Pressure

This is about being able to exert force onto the skis and can often be misunderstood by the learner skier. The simplest way to think about it is to break it down into; fore & aft (pressure along the length of the ski) and lateral (pressure distribution from one ski to the other).

For the learner, moving through the first half of the skiing spectrum, being centred is very important hence target point for fore/aft pressure is under the arch of the foot (where the index mark of the boot and ski are aligned).

More pressure should always be directed to the outside ski of the turn with the inside ski assisting rather than dominating. This will also aid better balance.

<u>Line</u>

This refers to the shape of turns that the skis are making. Typically, a 'C' shaped turn is a good goal as it promotes a good blend of rotation, edge and pressure. However, the skier will need to learn to vary the turn shape in order to negotiate changes in terrain (steeper, shallower, narrow, bumps etc.).

<u>Speed</u>

Speed and line interact together to influence the shape of the turn but the goal for most recreational skiers is to control the descent or be able to descend at a constant speed while making turns. The other element that has an important influence on speed control is the ability to skid the skis. Once again this is why side-slipping is such an important skill to develop.

<u>Timing</u>

This is about being able to not only make movements in the right sequence but also at the right time. Because skiing is an open skill this requires the skier to respond to the changes in terrain and snow conditions. For example, while a skier might understand and be able to make the correct movements for skiing in bumps (moguls) this will be of little use if they cannot time the movements to match the changes in the terrain.

Fluency

Fluency of movement comes from all the technical elements working effortlessly and efficiently. A fluent performance will look easy, smooth and skilful. Knowing how to blend technique and tactics together will produce more fluent performances.

<u>Tempo</u>

This refers to the speed or pace of the movements e.g. either fast or slow. Short turns in a narrow corridor will require a faster tempo of movements. This also links with the physical aspect of the performance threads in that skiing a faster tempo will also be more physically demanding.

<u>Agility</u>

This is often also referred to as nimbleness and is the ability to change the body's position efficiently. It involves a combination of co-ordination, speed, reflexes, strength and endurance.



Further Reading

- Snowsport Scotland Alpine Ski Leader Official Training Manual Drew Michie & Derek Tate Technical fundamentals
- Parallel Dreams Alpine Skiing Taking Your Performance to New Levels by Derek Tate – Segment 1 – Basic Principles of Skiing

THE TPO MODELS



The TPO Models are systems used to develop performance which can be implemented by instructors and learners. It can then be used to break down the relationship between different elements in order to change and improve performance.







The TPO Model – The concept using the technical example

In any given skiing situation, whether it is linking turns on a red slope or making that first ever slide downhill, as ski instructors we can make a judgement about that performance based on two considerations.



It is very important to note that:

- There is no 'single' SHAPE
- > There is no 'single' MOVEMENT
- In other resources you will find an entire chapter on the 'technical model' of the skier SHAPE and each resource arrives at pretty much the same conclusions.
- The same resources will have multiple chapters on the MOVEMENTS that a skier should make so that the skier could be described as 'skiing well'. There is more discrepancy between the 'movements' that should be used than there is between what 'shapes' will help skiers to perform well.
- This detail will be discussed later, but at this stage of learning thinking about SHAPE and MOVEMENTS will help you to form the basis for later understanding.





The 'Skiing Situation' or 'Whole Task' sets the parameters, i.e. traversing across a slope requires fewer forces to be dealt with than making turns as you go down the slope. The 'Shape' and 'Movement' ingredients will always be there but the proportions of each ingredient will vary and the skier has to blend the ingredients differently.

- * SHAPE and MOVEMENTS are referred to as '**Inputs**'.
- * Defining a TASK directs you to an '**Outcome**'.
- * The bit in the middle where the blending occurs is called the 'Process'.
- * Practice within the '**Process'** leads to achieving the TASK.







<u>The Inputs – How their Application Changes</u>

Elementary		Refined
	Balance	
Wobbly, based on upper body, reactive, sudden / gross movements, uncoordinated		Centrally placed, anticipatory, in tune with motion, fine adjustments
	Edge	
Minimal, binary (all on/all off) often unplanned, a defensive action, uncoordinated		Considerable, progressive (dimmer switch), planned, ready to deal with forces
	Rotation	
Uncoordinated, twisting, erratic, too much at the end, the whole body & top part first		Mostly with the lower half, using both legs equally, progressive
	Separation	
Whole body locked, tense, often leaning in		Hips & tips level, lower half leading & upper half following
	Pressure	
Legs stiff & braced, sudden, at the back of the ski, out of sync with turn, defensive		Adaptive, reactive, gained through body structure, measured and just enough
	Posture	
Stiff, tense, positioned, fixated on one aspect		Relaxed, responsive to forces, adaptive, strong in the body core



THE INSTRUCTING LOOP

The Instructing Loop is used as a cycle of analysis alongside the TPO Models to provide a framework for developing a skier's performance. It encompasses the different elements that can be used to change performance and allows a logical system to be implemented to help instructors when working with skiers and snowboarders.



Instructing Loop

It can be quite difficult to work out how to develop a learner's performance. Traditional instructor training gives examples of 'faults' and then lists of exercises to correct those faults. This creates the belief that fault 'A' will always respond to cure 'X', psychologists would regard this as an extension of the Stimulus – Response mechanism. This concept of problem solving works well in non-organic systems, e.g. computer software, or other mechanical devises. It also works in less developed organic life-forms such as laboratory animals and chickens, in fact that was where the original research was done.

Skiers are slightly more complex and the notion that error "A" is cured by "X" works by accident rather than design. A wise ski instructor will investigate beyond the error (the effect) and find out what the cause of the error is. Having established the cause, the instructor can then find a solution at the root of the problem rather providing a quick fix which will 'paper over the cracks'.

The Instructing Loop:

- Is a process that will help the instructor to find the best solution for the learner.
- Enables the Feedback principles.
- Is an integral part of the TPO Models.
- Is a critical part 'how to plan an instruction session'.
- Emphasises the need for repeated practice in order to gain improvement.



OBSERVE Are the Learners 'on task'?	The expectation is that an instructor will give an explanation and demonstration of the task to be attempted. Most learners will 'get' what is required. Some won't, the instructor should assume that the problems lies with "I don't understand' rather than "I can't do it'. The instructor needs to have another couple of explanations which can be given. Additional demonstrations should be given which will probably have a different visual emphasis.
ASSESS Are the learners 'on model'? Consider TTPPEE	As the learner is trying the new practice the instructor should assess how close they are to the 'model' performance, i.e. the intention of the instructor when he introduced the task. If the attempt doesn't match the model, then a solution for the learner's difficulties needs to be found. The 'shape theory' reduces what has to be viewed to 3 options and these are in priority order: • Is the shape of the skier correct? • Is the shape of the turn/curve/arc correct? • Is the shape of the skis correct?
SOLUTIONS Give helpful feedback on EEPPTT	 If the learner is 'on model' then the instructor should give more challenging practices, see next block of text. If the learner is 'off model' then the instructor needs to solutions which could be; A specific practice that will correct or raise awareness of the error. Attending to a particular INPUT. A particular focus that will direct the learner towards a different action or sensation. Re-arranging the sequence of actions that the learner is using.
PRACTICE Let them apply the feedback Additional challenges & variations	If the learner is to improve then they must practice the task until they can perform it correctly and consistently. To avoid frustration and 'boredom' the instructor should have 'additional challenges' which remain specific to the task, these challenge will add width of overall skill experience of the learner but must remain consistent with the original task • Have additional development challenges available so that your session remains inclusive.

The Instructing Loop emphasises that the learner remains on the original task until the instructor decides to set a new task.

The Instructing Loop is an integral part of the instruction session planner and ultimately how an instructor should arrange his or her learning sessions.



COMMUNICATION SKILLS

The success of any instructor, at perhaps every level of performance from beginner to the elite, is determined by his or her ability to effectively communicate with the learner and in turn getting them to better communicate with the instructor and each other. It's easy to focus primarily on the technical elements of snowsports — perhaps developing the learner's tactical awareness or technique — but it is all too easy to lose sight of the need to communicate effectively. Instructors may be knowledgeable and well organised, but without good communication skills, these attributes may never be reflected in the performance of their learners.

Instructors need to realise that when a learner comes into a snowsports school, that learner will be a self-conscious, nervous and anxious about being 'judged' not only by an expert but also by their peers. This should not be surprising given that the notion of insecurity is commonplace for most people – it's the reason why no-one volunteers to take their driving test again 10 years after they first passed. Most of the learner insecurity centres on their confidence and their ability to integrate;

- "I hope I don't fall and hurt myself",
- "I hope I'm good enough for this class",
- "I hope I don't hold the others back".

Generally speaking, most of their thoughts are negative. Your status as an 'instructor' can easily add to their insecurity or with wisdom can allay it. Let's start with some top tips to develop your learner - instructor communication.

Be Approachable

In general, your learners will be really nice, pleasant people; most of them will live interesting lives and have interesting jobs. They will be in awe of your job (in varying degrees) after all you are able to do what they can't yet do. If you show an interest in them as a person and make a connection with them then you have established a relationship that is not dependent on your acceptance of their weakness, i.e. their ski performance. When the learner knows that there is a 'non-judgemental' safe platform that you can both stand on then the learner can relax with the expectation that the 'non-judgemental' safe platform could easily extend to include their skiing performance. A relaxed, secure learner will be a better learner.

Become involved with your class at the non-ski level, listen and join in the general chat as you would with a group of friends in a cafe and remember that this lesson or 'holiday' is more about them than it is about you. Pay attention to both the verbal and non-verbal messages your learners send, spot the clues that mean 'tired', 'hungry, 'worried', 'bored'.

Learn to 'Receive' as well as 'Transmit'

Sometimes ski instructors feel that they have to give information all the time, it's often worse if you have a private or a 1-hour lesson when the need to cram in as much information as possible results in an overwhelming deluge. Two points to note:

- A learner doesn't function well if he/she is permanently on receiving mode.
- Leaners have a long 'turn into action' rate, i.e. the rate at which they can take information in, process the information, apply the information is much longer than an instructor would ideally like. Giving more information very often short-circuits the last (not yet processed) information. More practice is usually better than more information.



Be an Active Listener

Asking questions creates opportunities to find out what your learners know. You need to direct your question in the general vicinity but avoid becoming overly precise, leave space for the learner to tell you what they know. Listening to your learners will help you to realise what they have actually taken in, and creates the opportunity to add a supplementary question, paraphrase what they say, for example, 'So, what you are saying is...' or 'Are you suggesting that ...', 'If you did that what would happen next....'.

This technique not only verifies their knowledge but also confirms to the learner that you are listening and can relate to what they are thinking.

Empower the Learner

Allow the learner to work things out for themselves. Encourage them to ask questions about how they can improve their performance. Set the parameters and give permission for experimentation (as long as it's safe).

Develop a Communication Plan

This 'top tip' suggests that you should have a communication plan for your learner as well as yourself. Part of that plan is letting the learners know that they could be in one of 3 states:

- Sometimes the learner needs time and space to work things out.
- Sometimes they need confirmation that what they are doing is on the right lines.
- Sometimes they need more information.

The learner should understand that it's all right to ask for space or to ask for help. Try to learn how to 'spot' which one of those 3 states the learner is at. With experience you will know when you should intervene.

Establish Mutual Trust

Positive relationships are built on mutual respect and trust. Your learners must know that they can depend on you to be fair and positive, sometimes it might be necessary to remark on behaviour or decision-making but try to keep that private and leave personality out of it.

Make your Communication Positive

There is more on feedback in this reference book but briefly when providing helpful feedback use a positive triple step process, think;

- Done well... start with something they did correctly.
- Try this to make it better... give instructional feedback on how to get better.
- And then you will be able to... round off the feedback by letting them know what the effect of the 'getting better' section will have on their skiing,

The good, the bad and the slightly problematic!

Verbal and Non Verbal Channels



As an instructor, you can say a lot without uttering a word especially in an outdoor sport where your learner may be some distance from you and raising your voice to comment could be construed as shouting 'at' your learner.

Richmond, McCroskie and Johnson (Univ. West Virginia, 2003) published a paper, which suggests that between 65% and 93% of the meaning of a message is conveyed through tone of voice and nonverbal behaviours. The clear implication is that it's not just what you say, it's the way that you say it.

- Non-verbal behaviour includes hand or arm gestures, touching your knees or body movements to illustrate a technical feature. These are intentional actions that the instructor has made and are generally received positively by the learner.
- The instructor needs to be aware of more subtle forms of non-verbal communication, for example, head-nods, smiles, laughter and thumbs up which are generally positive and well received.
- Less well-received non-verbal messages are frowns, lack of eye contact, body posture, language and many other actions.

The facial expressions of learners give a good indication of how they feel, and a good working knowledge of the meaning of non-verbal signals such as glazed or down turned eyes indicate boredom or disinterest, as does fidgeting, coughing, fiddling with gloves or ski poles. Although it's sometimes tricky to spot below layers of goggles, helmets or hats raised eyebrows signal disbelief and furrowed brow or half raised eyebrows indicate puzzlement.

Blocks in Communication

"What we got here is a failure to communicate." – Paul Newman in Cool Hand Luke

Hopefully it won't get as bad as it did in the film but in general customer or learner dissatisfaction is likely to occur when there is a mismatch between learner expectations and instructor delivery. The standard advice is that instructor and learner should discuss, probably near the start of the session, the learner's expectations.

This is generally referred to as 'goal setting' and depends to a large extent on the learner having some experience of skiing. The likelihood of a beginner or novice skier arriving with a 'goal' is relatively low, they are normally happy to be guided by the instructor. Intermediate and Advanced skiers may well have a 'plan' which might or might not be realistic or, because terrain or time, possible. Very often the instructor will have to negotiate with the learner an alternative goal, a skill that comes with experience.

The following is an extract from research undertaken into the contribution and significance of communication between a coach and athletes, the sport in question was athletics. The principles established are of value to instructors. The term coach and athlete have been replaced with instructor and learner.

- The learner's perception of something is different to yours.
- The learner may jump to a conclusion instead of working through the process of hearing, considering and accepting.
- The learner may lack the knowledge needed to understand what you are trying to communicate.
- The learner may lack the motivation to listen to you or to convert the information given into action.
- The instructor may have difficulty getting the message over because emotions are interfering or there is a clash of personalities.

Effective Communication



Crookes states that before communicating with a learner, instructors should consider:

- WHY they want to communicate.
- WHO they wish to communicate with.
- WHERE and WHEN the message could best be delivered.
- WHAT is it that they want to communicate?
- HOW they are going to communicate the information.

Effective communication contains six elements

- Clear Ensure that the information is presented clearly.
- Concise Be concise; do not lose the message by being long winded.
- Correct Be accurate; avoid giving misleading information.
- Complete Give all the information and not just part of it.
- Courteous Be polite and non-threatening; avoid conflict.
- Constructive Be positive; avoid being critical and negative.

Conclusion

Crookes believes that instructors should:

- Develop their verbal and non-verbal communication skills.
- Ensure that they provide positive feedback during learning sessions.
- Give all athletes in their training groups equal attention.
- Communicate as appropriate to your learner's thinking and learning styles.
- Ensure that they not only talk to their learners but they also listen to them.

Improved communication skills will enable both the learner and instructor to achieve maximum benefit.

Further Reading

- > CROOKES (1991) Complan Column. Athletics Coach, 25 (3), p. 13.
- Ski Instructors Handbook Teaching Tools & Techniques by Andrew Lockerbie & Derek Tate – Blue Section – Delivery.

FEEDBACK & LEARNING PREFERENCES – VAK



Why is feedback so important?

- Without feedback there will be no improvement.
- Feedback can come from lots of sources, not just the instructor, and it is the accumulation of feedback that changes a motor performance.

A golfer can improve the outcome of his putting just by practicing, the fact that he is succeeding with a technically poor action is another matter, and he gets feedback from the result of his action – too long, too short. The judgement is a binary one based on the result and using this feedback he makes changes.



If we took the golfers feedback system and applied it to skiing, we would end up with:

- Make an attempt did you fall over or stay upright yes / no decision?
- If the answer is 'fall over', then change something.

The putting solution can be effective because putting is a closed skill, the same system doesn't work very well in skiing which is an open skill activity and consequently the learner needs feedback from a source other than the outcome. That is where the instructor fits in.



Feedback can be given at different times:

* before the task: * during the task: * after the task:

Ways to Give Information

People prefer to learn in different ways, for example some prefer to read instructions, other prefer to watch and copy. None of these ways of learning is the 'best way' and while each person may have a preference they can learn through one of the other 'ways'. There are lots of theories about 'learning' but the one which best suits skiing and the job of ski instructor is V.A.K.

- Visual what the learners watches
- Auditory what the learners listens to
- Kinaesthetic what the learner feels while trying to do a task



For a working snowsport instructor – a simple system will be the best system. The 'R 'is pretty irrelevant when you are snowsports instructing – so we propose that you use V.A.K. – Visual, Auditory, Kinaesthetic. And that fits really well with the V.A.K. options which an instructor will can as feedback tools.

When providing feedback think about;



- **Relevant** the feedback must refer to the task, if the task was to do with the legs avoid any other issue, focus on what the learner was trying to do.
- **Immediate** as the learner is coming towards you, you are working out what feedback you could give, in other words when it is your time to talk you create the impression that in your mind you have the bases covered.
- **Positive** the first part of your feedback must be positive, it should reflect something within the task that the learner did well.
- **Specific** make your comment accurate and meaningful, avoid using 'good' in general terms, be specific you did 'xxx' well and I liked the way you tried to do "yyyy"

Types of Feedback

Knowledge of Results – KR

- KR comes after the movement and is another source of information that is fed back into the stages of processing, often this feedback is provided verbally.
- Sometimes, the learner already knows the information, e.g. the skier fell over.
- Without KR we cannot improve performance.



• KR is the 2nd most important part of the learning process; the most important part is practice.

Knowledge of Performance – KP

- KP focuses on the 'process' not the outcome.
- Primarily concerned with movement pattern not outcome success.
- Instructors/coaches often provide KP in order to improve the quality of the performance.

How the Learner gets Feedback

Extrinsic Feedback	 This is feedback that may be provided from an external source, usually the instructor. It could relate to the process – KP. It could relate to the outcome – KR.
Intrinsic Feedback	 This is information which the learner gains though all of their senses, but mostly V-A-K. It comes automatically. Very often it is feedback that is produced by the learner's actions, but sometimes the actions of others can generate feedback, e.g. someone moves into the area you planned to ski into. Sometimes the learner might receive the information but not respond to it.
Augmented Feedback	 Augmented feedback is extra feedback, i.e. it is in addition to what the learner has gained intrinsically. It may be provided by an instructor/coach or device, e.g. video replay. Ideally it adds information that the performer cannot detect.

Change your KISS to a KICC

Most people will be familiar with 'Keep It Short and Simple', but that is not quite what is required. A better principle to remember when it comes to deciding how much feedback to give is "Keep It Clear and Concise."

Your feedback should provide the learner with the most helpful information possible. Keeping extrinsic feedback concise means giving leaners the feedback that is most relevant at a particular moment. In other words, quality is more important than quantity.



As long as learners are attending to relevant sources of intrinsic feedback, they don't need (or usually don't want) additional information from you. Confirmation that they are doing the 'right' thing can be given by a nod, a smile or a 'thumbs up'.

Recent research indicates that people benefit more from feedback, which is given when they ask for it, rather than when the instructor decides they need it.

Delivering Feedback

The ideal scenario is to deliver feedback is immediately after a performance. The theory is that immediate feedback allows the learner to establish a bond between what they did and the instructor's observation.

Let's assume that we are dealing with an 'ideal' scenario.

- The learner a good explanation and demonstration of the task.
- The learner attempts the task.
- On the first attempt the instructor is checking to make sure that the learner seems to understand the task. Confirmation feedback would be helpful to the learner.
- On the second attempt the instructor watches and is considering R-I-P.
- The instructor engages "2 + 1" and at least one V-A-K channel.
- The learner attempts to apply the solution as soon as possible.

2 + 1 Delivery

A 2 + 1 system is used in Primary schools where it is very often called "two stars and a wish". The two stars are 'things' which the teacher feels that the learner is doing well and the wish is one 'thing' that the teacher would like the learner to improve upon. As the learner becomes more competent the detail, especially in the wish, becomes more demanding.

The UK Snowsport 2 + 1 system will work well with all skiers (youngsters, teenagers and adults) who are in the earlier stages of the skiing spectrum. For more competent skiers the delivery system changes slightly and this is detailed in the Instructor course.





Further Reading

Ski Instructors Handbook – Teaching Tools & Techniques by Andrew Lockerbie & Derek Tate – Red Section – Understanding the Theory.



TEACHING STYLES

This chapter leans heavily on the work of Muska, Mosston & Sara Ashworth. Their book titled "Teaching Physical Education" has become the default manual for teaching sport skills, more interestingly teachers of other subjects (which generally speaking don't have a compendium of 'ways to teach') who have been introduced to Mosston's work have adopted and adapted them to suit their work in environment. Their work is often referred to as 'Teaching Styles" and this can be off putting for some people who regard 'style' as being a personal or individualised statement. In the context of the book 'styles' is in fact a 'structure' and the Teaching Spectrum provides guidance 10 different teaching styles/structures.

At one end of the Spectrum is 'Command' (style A) while at the other end is 'Self Teaching' (style J). Although the styles appear to have solid lines of delineation wise instructors and coaches blur the edges in order to aid learning, crossing from one structure to another and back again is no bad thing.

The basic premise is that what a teacher intends to happen works out to be similar to the actions the learner makes or ends up with.



Mosston uses the maths symbol ' \cong ' for congruence meaning *similarity* as opposed to ' \approx ' which means approximately equal. The teaching styles give guidance as to the most appropriate sort of structure that will satisfy the intention. The teaching styles take into account, the type of activity, the stage of learning, the learners and the environment.

Spectrum of Teaching Styles



The arrangement of the spectrum is based on one simple question:

"Who decides what will be done?"

At the left end of the spectrum this decision is made by the instructor, at the right end of the spectrum the learner makes the decisions.



The styles are expressed as two categories;

Reproductive

Productive

Styles A- E are defined as being reproductive; the intention is that the learner reproduces the demonstration or the instruction given by the instructor. The closer the learner can get to the 'model' the better. This is useful because the learner, at this stage has little experience that they could use to experiment with performance variables. While initially they will benefit most from learning in style A-B as the learner gains in experience they will be able to access style C, D & E.

Styles F-J are defined as Productive. The intention is that the learner has enough experience to be able to produce his or her own possibly unique performance. The instructor role in the productive category is to facilitate the learner in extending their range of skills. If the learner is to achieve their full potential the instructor must set the groundwork of exploration at style F before progressively allowing the learner to set the performance agenda.

Given the remit of the Instructor qualification most instruction will be in styles A – E, i.e. the 'Reproductive' category.

It is expected that Advanced Instructors would be able to work with learners in style F & G, i.e. the beginning of the productive category. Developing performance through style H, I, J and K is really for those approaching the elite level and their needs are better served within a coaching environment rather than a ski school instruction environment.

Experience Matters

The choice of style will be affected by the experience of the instructor. Early in their career instructors will tend to operate at the left end of the Spectrum and that is perfectly understandable. The inexperienced instructor will have a low reservoir of material to use with learners, the instructor will want to stay in control and the instructor will have concerns about instructor his or her own performance – are my demos good enough?

- With experience the instructor will set up practices where learners can work as buddies to help each other improve and perhaps set up a little route through markers so that the learner can find out for themselves how well they are performing.
- Perhaps the instructor will spot that some learners are finding a task particularly easy so she gives them an extra challenge of a task that's a bit trickier while the rest of the group work on the original practice.
- An instructor who is curious about doing things a bit differently rather than sticking with the same 'fall back' session could easily be quite competent at the first five styles (the reproductive ones) within 80 hours that's about 4 weeks of instructing.
- The key to being a good instructor is curiosity, experimentation and having the "I wonder if this could work?" mentality?



Experience of the Learner Matters too

Style A & B require no input from the learner and they are therefore ideal for beginner and novice learners. Using styles C – E requires the learners to start applying some thought to the process of improving. A good instructor will want the learner to not only ski or snowboard when the instructor is not 'in charge' but also to work out what they should be doing that will consolidate their performance.

This independent learning is much more likely to occur if the instructor has been discussing and questioning the learner about how they are performing or how they might make adjustment. This is when the instructor needs to able to use receive mode, as well as the transmit mode which was explained in the communication section.

Selecting the Style

Deciding which style would be appropriate depends on multiple factors. The instructor should choose the most suitable style based the on the information which is put in front of them rather than referring to a previous experience which has been successful. Essentially the style used for a group of novice skiers or snowboarders last week will not necessarily work with a group of novice skiers or snowboarders this week. The instructor needs to make certain that when selecting he has considered all the facts not just the where the learners are on the Spectrum.

There is no formula which can be applied to solve the 'which style' question. Instructors will become more expert with experience.



Further Reading

- > Teaching Physical Education Online Edition 2008 by Muska Mosston & Sara Ashworth
- Ski Instructors Handbook Teaching Tools & Techniques by Andrew Lockerbie & Derek Tate – Black Section – Teaching Styles in a Snowsports Environment.
- Snowsport Scotland Alpine Ski Leader Official Training Manual Drew Michie & Derek Tate Teaching and Learning



TTPPEE (EEPPTT)

This is an acronym that is used to help an instructor when he or she is working with learners. It is essentially a mental 'check list' which should be used throughout a typical teaching session whether it is a 1-hour session, a morning, an afternoon or whole day session.

Traditionally ski instruction has used the Technical channel as his or her first and main 'tool' when trying to make changes to a learner's performance. TTPPEE adds to the information and suggests other areas the instructor could use, keeping Technical as the last weapon in the 'how to make a learner better arsenal'.

To recognise the true priority of TTPPEE, it should be reversed by Instructors to use it as a priority list, i.e. the instructor should check the EE's, then the PP's and then the TT's.



Most of your learners will generally be either beginners or inexperienced skiers and it is the knowledge and the experience of the learners (rather than the instructor), which means they will probably need a lot of EE & PP attention.

T – Tactical T - Technical

As you read the detailed descriptions on the next pages you will start to see that if the 'EE' s are not correct, then it will create 'PP' problems and this will make the session less enjoyable for your learners. Taking it to the next stage, if the EE is wrong and the PP is wrong then trying to make tactical or technical changes will be very difficult.

Equipment

Thinking about the 'hardware', i.e. boots, skis and poles:

- Are the boots on the correct feet?
- Do the boots look the right size? Too small means pain and cold feet and too big means possible rubbing and lack of control. A calf can be painfully squeezed by over enthusiastic 'top clip' tightening.
- Do the bindings fit the boots? Beginners won't realize that skis that look the same (graphic and length) will be adjusted to a specific boot length and they may mix skis up.
- Do the bindings appear to be working correctly? Are they pre-releasing (DIN set to low) or hard to step into (DIN set too high or adjusted too short).
- Do the learners have ski poles? Do they need them?
- Are they the correct length? Are the baskets and straps intact?
- Do the straps work and do they leaners know how to hold the handles properly?



Does the equipment which the learner has enable them to perform what you (the instructor) intends?

- Borrowed skis might be; too long or too short, poorly maintained.
- Are the skis the right length?
- Borrowed or hired boots may be too stiff or soft in flex.

Thinking about the 'software', e.g. the learners clothing assembly:

- Is their clothing going to give them enough protection from the overhead conditions (weather) and the surface they are going to be skiing on?
- Has the learner tucked 'stuff' into their ski boots? Folded material inside the boot will cause pressure points and pain for the learner.
- Should they be wearing helmets? Do they need gloves/mitts? Should they have skin and eye protection?

A ski instructor should maintain an "equipment' awareness during most instruction sessions, it is very likely that someone in each group would benefit from some sort of equipment 'review'. Often changing a learner's boots can make a bigger difference than 3 days of instruction.

Environment

Thinking about the terrain & surface:

- Have any hazards been cleared?
- Are other slope users likely to create safety problems?
- Does the terrain help the learner to slow down?

Thinking about how appropriate the terrain and surface is:

- Will it enable the learner to perform what you (the instructor) intends?
- Is the surface too fast (icy snow) or too slow (sticky mat)?
- Is there enough space to enable the group to practice continuously, MCA?
- Is it easy for the learner to step up the slope and get into?
- Can the class be managed so that space is better used?
- Is the terrain too steep, is it possible to avoid going straight down?
- If the environment (terrain & surface) can't be changed is it possible to change the task?

<u>Physical</u>

Does the learner have any restrictions which will prevent them from doing what you (the instructor) intends?

- Do any of the learners have disabilities that you need to take into consideration?
- Do any of the learners have injuries?
- Does anyone have medical problems, e.g. asthma, bronchitis or cardiac condition?



Do the learners have the fitness that will enable them to participate throughout your session?

- Fitness is specific and no other sport places similar demands on a learner. Given that skiing for beginners is about managing their body mass then absolute strength is not required, however the fact that the learner is using muscles in a different way makes it seems that strength is a feature.
- Some learners will try to substitute strength for subtlety or smoothness and instructors very often have to encourage these skiers to make relaxed movements.
- Leg flexibility isn't particularly important for beginners but there is a demand on flexibility around the middle of the body, specifically where the femurs and spine join into the pelvic region. Older learners tend to be very tight and stiff while younger learners are very often 'over floppy' and lack muscle tension (tone) that will enable them to maintain good posture.
- Pacing the learner is important especially if they are signed up for a series of lessons. Many will be tempted to work too hard and will need to be told, "it's not how many you can do, it's how well you can do it".

Psychological

What might be preventing the learner from doing what you (the instructor) intends?

• The key word is anxiety. Anxiety is "a feeling of worry, nervousness, or unease about something with an uncertain outcome."

Is the environment causing stress?

- Be aware that a learner's notion of height could well be different from yours, looking down an unfamiliar slope can create a feeling of vertigo.
- Is the 'sliding' area narrow which might make the learner worry about bumping into another person?
- Is the surface uneven which might make the learner concerned?

Is the task causing stress?

- Is the act of trying to catch a glove more of a problem than sliding?
- Is bending down to get under a ski pole quite concerning?
- What will happen if I crash into the ski pole instead of stopping in front of it?

Are previous physical injuries causing psychological problems?

• The learner may have an 'old' injury that they are worried about.

Are any of the other learners causing stress?

• Consider re-arranging the class, changing the environment or setting a different task.

<u>Tactical</u>

When the learner is about to make turns then tactical gains greater significance.



Tactical could also be applied to when to sideslip or traverse as well as selecting the most suitable part of a slope to make the turn on.

Tactical will generally describe the 'shape of the arc' and when to make those arcs.

As a general rule 'C' shape arcs will be best because they give the learner time to feel and adjust the inputs during the arc.

Timing and confidence will play a part in 'when to make the arcs', but the greatest affect will be due to the shape of the arc. At the elite and racer end of the Spectrum skiers will move away from making 'C' shape arcs and start to make arcs which are responsive to the demands of the terrain (or race course).

For ski instruction (as opposed to a race coach) most tactical instruction will be down to arc shape and the ability of the learner to make different arc depending on the steepness of the terrain.

<u>Technical</u>

These are normally the INPUT's that a beginner learns are exactly the same ones that an expert needs to use in order that they can ski effectively throughout the Ski Spectrum. The difference being that a beginner gets the feeling of the INPUT's on flat slopes when moving in a (fairly) straight line whereas the expert will be trying to apply the INPUT's when making arcs and that means having to deal with new forces.

Technical will focus on skier shape and movements which means that the instructor will have to have identified which INPUT is in greatest need – refer to 'whole Task' & subroutines. Always work on a Primary focus with a Secondary focus as the back-up but avoid overloading the technical detail.

Correct environment is important if the learner is to develop so select carefully, it is better to work on 'easy' terrain and give the more competent learners 'additional challenges'.

Tactical & Technical form a large part of the instructor training on snow. What you learn there should be taken down as your personal notes on how to apply Tactical & Technical when you might work with learners.

Further Reading

Parallel Dreams Alpine Skiing – Taking Your Performance to New Levels – by Derek Tate – Segment 3 - All Mountain Skiing



MOTOR LEARNING

Throughout life we are constantly trying to learn new skills and improve existing ones. This starts very early with movements like crawling & walking, with this development of motor learning continuing as we get older by trying new sports and other physical activities. In a snowsports environment, Skills Acquisition concerns the perceptual, cognitive and motor skills required to learn and develop performance for skiing or snowboarding.

A critical feature of the Spectrum is that the INPUTS (the essential ingredients) that combine to make a skiing or snowboarding performance are progressively added to and nothing is made redundant. The performance becomes increasingly skilful when the skier or snowboarder improves their competence at the INPUTS.

	balance	posture	separation	rotation	edge	pressure
plough turn						
parallel						
bumps						



In terms of Motor Learning, snowsports is a linear activity, i.e. the learner, having notionally started from 'zero' doesn't become reasonably competent at a handful actions and then goes back to 'zero' to learn a different set of unrelated actions. In snowsports what one learns in the earlier part of the spectrum remains relevant and is a key feature of performance at the higher end too.

As a comparison, consider football; football has distinct and discreet skill groups, e.g. dribbling, shooting, heading, passing and tackling. If you have learned how to 'dribble the ball' the competence at that skill will not help you when it comes to 'heading'. As a learner you will have to go back to 'zero' so that you can develop competence in 'heading'. The same applies to 'tackling', being good at 'heading' doesn't help with 'tackling', i.e. there is no positive transfer of skill.

Some learning stage models feature an autonomous stage and this fits most obviously with non-linear skill activities such as football. Achieving an autonomous performance only occurs after considerable practice. The practice doesn't have to be correct for the performance to be autonomous, it is perfectly possible, for example, to swing a golf club badly but score very well. Similarly, skiers and snowboarders can 'get down' a slope safely and in control but with very poor technique. Becoming autonomous does not therefore mean doing it well it just means that you have done it lots of times.

Autonomous Performance and the Learner

As an instructor would you expect your learner to practice until they could make plough turns autonomously?



In snowsports the 'autonomous' stage might only be relevant at the higher end of the Spectrum and even then performing autonomously is a fleeting, transient phase because the environment plays such a great part in the sport. For example, a run that could be dealt with effortlessly one day might be a real challenge the next day.



A learner who is working on plough turns does not need to be 'perfect' at them, they just need to be sufficiently competent and

experienced at plough turns to enable them to move onto the next stage in the progression. NB. It should be noted that before a learner is 'moved on' from one stage to the next they must have achieved a lot of 'width' to their learning, i.e. they need to be experienced with different; snow conditions, speeds, lines and tempo but not greater steepness. It is applying the skills from the next stage in the progression that enable the learner to cope with increased steepness.

In snowsports becoming autonomous is not the best goal, one 'autonomous' run should lead the performer towards wanting to do it even better next time.

Be open ended because the performance of a skier or snowboarder will always be constantly evolving as new challenges constantly arise.	Not require a return to 'zero' when the learner wants to extend their skill set.
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Schmidt's Schema Theory

Schmidt's theory is based on the view that actions are not stored. Rather we refer to abstract relationships or rules about movement. Schmidt's schema is based on the theory that that every time a movement is conducted four data sets (information) are gathered:

- the initial conditions
- certain aspects of the motor action
- the results of the action
- the sensory consequences of the action
- starting point
- how fast, how steep etc.
- success or failure
- how it felt

Schmidt's suggested that to perform a skill we need three things:

- A Generalised Motor Programme (GMP)
- Recall Schema; and
- Recognition Schema.

The term **Generalised Motor Programme** is used for two complementary principles. One principle is; it's the shape and feel of movements that learners gain that are not specific to any activity, e.g. the basic ability to swing a stick or do a roly poly down a hill. It's called 'generalised' because the programme doesn't just produce a singular action. It can spawn a variety of similar actions, such as forehand drive in tennis or a somersault in gymnastics.

The other principle is; it is the action that is used to achieve a specific goal or intention. Schema theory states that the precise action made by a GMP is driven by specific circumstances (e.g. speed, steepness, snow condition), which are fed to the GMP by the second part of the theory, the Recall Schema. Recall Schema are simply 'bits' of information that are used to adjust the GMP.

The Recall Schema



The recall schema provides adjustments to the GMP after understanding the circumstances (initial conditions) and your intentions (plans). For example, if the slope gets steeper a 'Recall Schema' will feed adjustments gained from past experience that will 'recommend' changes of direction and speed to a GMP, which will enable you to cope with the alteration to the environment.

In order to be effective the GMP needs to get a recommendation from the Recall Schema. If the performer doesn't recognise the change in environment the GMP won't be adjusted so a 'failure' is likely. Beginner skiers have this problem, they don't have enough experiences, i.e. the Recall Schema is 'empty' so 'it' can't send the recommendations to the GMP.

The Recognition Schema

Recognition schema is what allows you to know when you've made an error. These are the results of the actions; the response outcomes gained though feedback; mainly KR, but unlike other sports which predominantly use extrinsic KR, snowsports normally engages intrinsic KR based on our kinesthesis to create a sensation of how the skill felt. It's the "that didn't work out well feeling", but the smart learner will automatically update the 'Recall Schema' - "don't tell me to do that again please!"

The Recall schema is based on initial conditions and the subsequent results and is used to generate a motor program to address a new goal. The recognition schema is based on sensory actions and the outcome.

Gentile's 2 Stage Model

Getting the Idea of the Movement

This is the initial stage where the learner is getting to grips with any given skill. The learning is based on testing movement patterns until the right feeling and coordination is established to achieve the goal or aim of the skill. Within this first stage Gentile refers to learners beginning to gain an understanding of regulatory and non-regulatory factors that may affect the performance of the skill. Sounds complicated but the classic explanation to accompany it is this:

"Regulatory conditions are conditions that will change the movement pattern of the skill, e.g. when reaching for a cup, the distance between you and the cup, the shape of the cup and the size of the cup are all regulatory and can be changed. *Non-regulatory* are the conditions of the cup that will not affect the movement pattern such as the colour of the cup or the shape of the table it sits on. So in essence the learner will discriminate between what is relevant information and what is irrelevant in achieving success."

Fixation / Diversification

In this second stage the skill gradually becomes fixated (grooved or repeatable) which is useful in the early stages of open skill but loses its significance as the learner becomes more competent. With closed skills, which have no change in environmental conditions, e.g. throwing darts, fixation is critical for success.

With open skills where environmental conditions are always shifting and changing, e.g. slope angle or snow texture, the learner must learn to 'diversify' the skill in order to adapt to the changing environment in order to gain success. The learner will gradually learn how to monitor the environmental conditions and modify the movement pattern accordingly.

Fixation - 2nd stage for closed skills

- Practice same skill over and over to refine movement pattern.
- Making it as energy efficient as possible.



• Problem for snowsports which are subject to persistent environmental change.

Diversification - 2nd stage for open skills

 Makes movement adaptable to the environment by practicing as many different varieties of movement as possible.

Gentile's 2 Stage Learning doesn't quite match the performance demands for snowsports. It does match the Fitts & Posner implication that 'if you want to learn something new you have to go back to the beginning'.

Most snowsport enthusiasts would question whether 'fixation' is relevant to their sport. However, it does score highly with the notion of diversification and smart performers, instructors and coaches will probably incorporate that into their skill set.

A Skill Acquisition Model that suits Snowsports?

To explain this, we apply a 'two stage' model.



The more time that can be spent at this stage the better it will be for the learner as they move to become higher level performers.	The second stage takes what has been learned and allows experimentation in different contexts
At this stage it is critical that the instructor encourages 'width' in their learning by practicing on different slopes that enable the learner to perform without compromising the quality. Unfortunately, many instructors rush the progression and this leads to them hitting plateaus of learning.	As the performer becomes more competent they will become increasingly accurate in applying the inputs and will eradiate any unnecessary actions. Their performance will become refined. In relation to the Snowsport Spectrum one would expect that the learner is in the Red Zone for competence (not to be confused with skiing/boarding red runs)
The learner has acquired a degree of comfort with the primary and secondary foci and is now starting to consolidate those competences.	This level of performance is generally within the skill set of an Advanced Instructor who has considerable experience in working with learners and who has considerable experience in applying the Primary and Secondary foci within his/her own skiing. The second stage does not end here. The second stage is limitless or perhaps it would be more accurate to say is confined solely by imagination.



A learner who is at this level will continue to explore their development and their focus will move * Creativity * Improvisation towards;

- * Composing personal & unique patterns of action

By its nature this sort of learning is less about instruction and more about teaching/coaching/guidance that helps the learner achieve their optimum level.



SKILLS DEVELOPMENT

Developing a Skill

"Some people never learn anything because they understand everything too soon" - Alexander Pope

During skill development your learners will move through some predictable stages to improve their performance. The table below gives an overview and an outline of the skill development process. It focuses on how to identify where your learners are, what your learners need at each stage and the environment that will help them to develop.

The length of time any learner will need to progress from one level to the next will vary greatly. It is therefore very important that you recognise the stage of skill development your learners are at in order to help you to plan your lessons.

Stages	Identify	At this stage learner's	Environment
Initiation	The first contact the learner has with the skill.	Have a clear mental picture of what a correct execution looks like and understand the skiing fundamentals required. Feel safe when performing	Stable and predictable, free of distractions.
Acquisition	The early stage of learning where the learner becomes capable of coordinating the key components of the movements and executing them in the correct order, thus performing a rough form of the skill.	Understand clearly what they have to do, and have a good mental representation of the task. Perform a lot of repetitions at their own pace and under conditions that are stable, easy, and safe. Training on both sides, if appropriate. Find some solutions by themselves through trial and error, based on some feedback from the instructor.	Stable and predictable, free of distractions.
Consolidation	The learner can execute the movements or the skill in the correct form. Movement control, synchronization, and rhythm are good when performing the skill under easy and stable conditions. Some elements of performance can be maintained when the learner is under pressure, conditions change, or demands increase, but performance remains inconsistent.	Be exposed to a variety of situations, and perform a lot of repetitions under varied conditions. Be challenged by more complex and demanding tasks or conditions, and find more solutions through trial and error, based on less frequent feedback from the instructor.	Increased variability and distractions in the environment, but not to the point where movement patterns deteriorate.
Refinement	The learner can execute the movements in a way that is very close to the ideal model in terms of form and speed. The performance is very consistent and precision is high, even under very demanding conditions and in situations that are both complex and varied. All components of the movement have been automated, which enables the learner to focus on the environment during the	Be exposed to complex or demanding terrain that requires the skill to be executed at a high level. Be trained on how to develop solutions to the problems encountered entirely on their own.	Challenging conditions & terrain.



	execution and to make rapid adjustments as necessary. The learner can reflect critically on his or her performance to bring about corrective measures.		
Create Variation	Only the very best performers achieve this stage. The movements can be performed according to the ideal model, and the performer has developed a personal style that is efficient. Personal interpretation of movements or personal movements can be combined into unique patterns in response to specific situations.	Be exposed to complex or demanding terrain that requires the skill to be executed perfectly. Develop their own solutions.	Challenging conditions both in terms of terrain, snow conditions and potential distractions.

NB: Please note that these sections on "**Motor Learning & Skills Development**" describes some of the theory behind this specific part of skill acquisition and for a more complete model of skill development / acquisition check out the further reading.

Further Reading

- Irish Snowsports Teaching Methodology incorporating the KMPF Skill Acquisition Model <u>http://www.iasisnowsports.com/istm</u>
- > Attention & Motor Skill Learning, 2007, by Gabriele Wolf

FIS CODE OF CONDUCT



Ski Way Code

- 1. **RESPECT OTHERS** All snowsports users must behave in such a way that does not endanger or prejudice others.
- 2. **CONTROL OF SPEED** All snowsports users must adapt their speed to their personal ability.
- 3. **CONTROL OF DIRECTION** A snowsports user coming from above must avoid snowsports users below.
- 4. **OVERTAKING** It is permitted to overtake another snowsport user going up or down the hill, to the right or left, but always leaving enough margin for the overtaken person to make their turns.
- 5. **CROSSING THE PISTE** When entering a piste or starting downhill look out for other snowsports users.
- 6. **STOPPING ON THE PISTE** If not absolutely necessary, a snowsport user should avoid stopping on the piste, especially in narrow passages or where the visibility is restricted. In the case of a fall, a snowsport user must move to the side of the piste as soon as possible.
- 7. **CLIMBING** A climbing snowsport user must keep to the side of the piste and in bad visibility keep off the piste entirely. This also applies to those descending on foot.
- 8. **RESPECT FOR SIGNS** A snowsport user must respect all signs.
- 9. CONDUCT AT ACCIDENTS Everybody is duty bound to assist.
- 10. **IDENIFICATION** Everybody, witnesses plus those involved must give their contact details at an accident.

Snowsport Instructor Rules

- 1. The Snowsport School are responsible for placing the clients into classes according to their ability.
- 2. The Instructor should not allow clients to take risks beyond their ability, also take into account the weather and snow conditions.
- 3. The instructor must remind clients that during lessons that they do not have any priority on the piste and they should respect the Ski Way Code.
- 4. The Instructor must teach their clients the Ski Way Code.



BIBLIOGRAPGHY & FURTHER READING

Attention & Motor Skill Learning, 2007, by Gabriele Wolf

CROOKES (1991) Complan Column. Athletics Coach, 25 (3), p. 13.

FIS Rules of Conduct for Skiers and Snowboarders

Irish Snowsports Teaching Methodology incorporating the KMPF Skill Acquisition Model http://www.iasisnowsports.com/istm

Parallel Dreams Alpine Skiing, 2007 – Taking Your Performance to New Levels – by Derek Tate

Ski Instructors Assistant, 2014, by Derek Tate, available as a free download from <u>Apple iBooks</u> https://itunes.apple.com/us/book/ski- instructors-assistant/id916145002?ls=1&mt=11

Ski Instructors Handbook – Teaching Tools & Techniques by Andrew Lockerbie & Derek Tate – available in print or as an eBook.

Ski Instructors Handbook - Technical Skills & Drills, by Andrew Lockerbie, 2011

Snowsport Scotland Alpine Ski Leader - Official Training Manual - Drew Michie & Derek Tate

Spectrum of Teaching Styles, Mosstons & Ashworth http://www.spectrumofteachingstyles.org

UKCP Skills Development Pathway