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## SPECIAL EDITION INTERSKI 2015, Ushuaia

### Foreword

**Riet R. Campell, Director SSSA**

It is certainly something different to be attending an INTERSKI Congress in what for us would be right in the middle of the hunting season in South America. However, it is precisely this seasonal and temporal shift in a skiing destination that many people may never have heard of that could potentially inspire new ideas and pave the way for their implementation. The ISIA event at the congress represents a start in this respect. We also hope that the many workshops and small lectures offered by Swiss Snowsports in a new cultural setting will inspire the participants to consider new approaches to snow sports instruction. I look forward to seeing plenty of positive comments and happy memories broadcast all over the world via social media channels such as the Internet, Facebook and Twitter from Cerro Castro, Ushuaia's ski resort. We thank the Argentineans for all their hard work and wish everyone a successful congress.

### Introduction

**Andri Poo, Education SSSA**

This Academy and the Interski workshops aim to show snow sports instructors and coaches how they can convey enthusiasm for snow sports to children and teenagers and what factors influence their teaching. In addition to the various development stages and the learning atmosphere, digital aids to teaching can also be used as motivating elements for children and teenagers. Swiss Snowsports has recently been paying close attention to the possible applications, uses and risks of various methods and products. With their specialist, educational and methodological expertise, snow sports instructors should be able to plan lessons that are appropriate for each group and use the teaching aids correctly.

We hope you enjoy the Swiss workshops!

### Introduction

Jan Kindschi, Coach Swiss Snow Demo Team

### Switzerland at Interski 2015

The Swiss Snow Demo Team consider it an honour to be asked to represent the skiing nation of Switzerland at Interski. The team consists of 11 skiers, 4 snowboarders, 2 telemarkers and 2 cross-country skiers. Our main purpose is to provide training courses for snow sports instructors in Switzerland. We develop new trends and teaching manuals and perform at various show events at home and abroad.

We have been preparing for Interski in Ushuaia (ARG) since October 2014. At this year's Interski, the Swiss Snow Demo Team will be taking part in 4 show descents on the demo slope, a technical presentation on the demo slope and also in lectures in the theory room and in the practical workshops on snow.

We have launched a Swiss Snow Demo Team Facebook page especially for Interski. It is called "Road to Ushuaia". This is where you will find the team's news. The Road to Ushuaia will be documented and there will also be up-to-the-minute messages posted to our friends during Interski itself. On location in Ushuaia, we will be creating awareness next to the slopes with our specially produced posters and postcards.

The entire team is really looking forward to their adventure in the southern hemisphere. We are ready to represent the skiing nation of Switzerland to the best of our ability at Interski!

### SSSA philosophy and development

We shall take advantage of the opportunities provided in the practical workshops and lectures to present our philosophy and products to other nations.

We offer an interesting range of products with the 2010 series of teaching manuals, the new children's manual, the Swiss Snow League update and the new Swiss Snow Academy. We will integrate these in the workshops. We will link the themes with the current further training topic 14 "Learning with pictures".

Here, the focus is on the learner, especially the teenage learner. For younger learners (children), the learning path changes according to their stage of development. The main theme of the workshop is how the instructor needs to adjust when teaching teenagers.



### Children's instruction

Awareness is how we access our world. This applies to both adults and children. A snow sports instructor can train awareness during lessons by adopting a targeted approach. This is mainly carried out by varying the intake channels. In this way, the children learn how to cope with both external information – i.e. visual, acoustic or tactile information – and internal information, i.e. kinaesthetic or vestibular information. Being aware of your own body and learning how much muscle tension is required for each activity needs constant practice and this is mainly achieved through play when instructing children.

The lesson should always focus on the child with his or her requirements and needs. For younger children, there is a lower percentage of snow sports instruction compared to general supervision. The older the child, the more time is devoted to explaining the sports equipment and related movement exercises.

The following points need to be observed in particular:

- Children have a short attention span. The following formula is a rule of thumb for their ability to concentrate:  $\text{age} \times 2 + 2 = \text{approx. ability to concentrate in minutes}$ .
- Children have a very large head and fairly weak core muscles compared to adults and this has an effect on their position when doing sports.
- The resilience of the child's body is still limited and children of the same age sometimes show a difference in development of several years.
- To ensure children benefit from snow sports instruction and remain motivated during lessons, it is crucial to create the right learning atmosphere (see next page). The instructor's conduct and ability to motivate is very important as his function is that of a role model.

Children also have different reasons for attending snow sports lessons. Some of them want to have a fantastic experience in a group, others want to compete against each other and others want to learn new moves or just have fun in the winter scenery. All these needs must be met by the snow sports instructor.

The curriculum of Swiss Snowsports and the Swiss Snow League/Academy take all these circumstances into account.

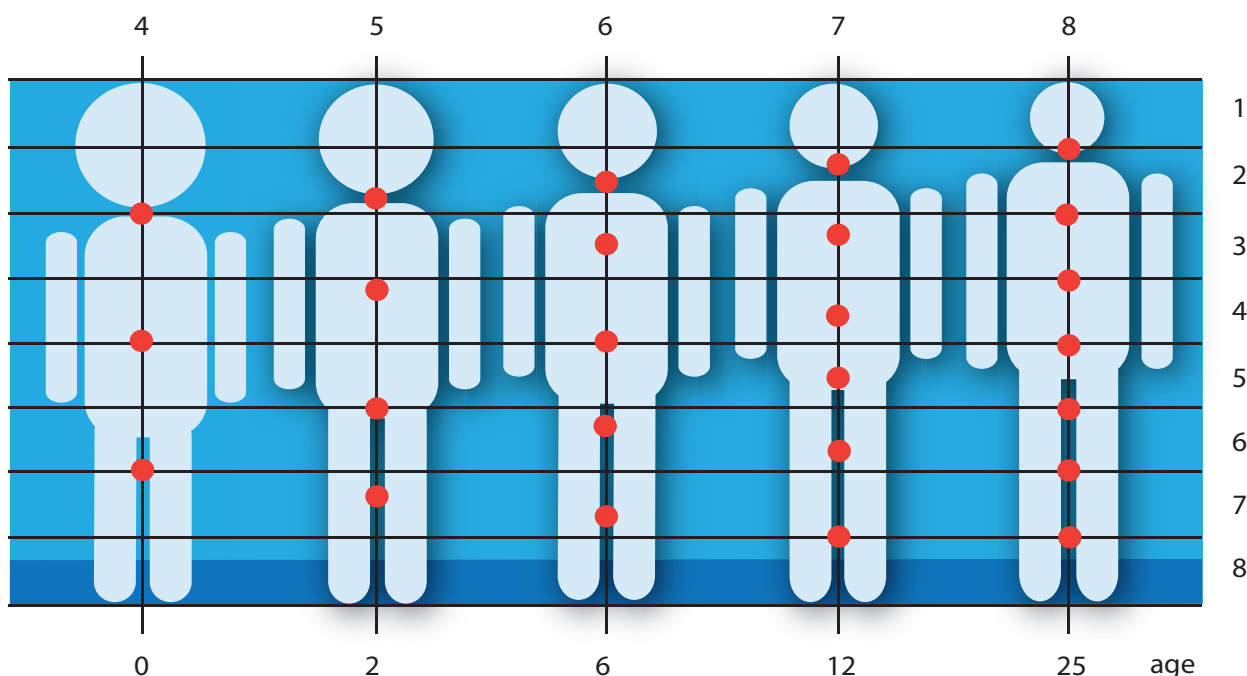
### Development stages

In addition to the points mentioned above, the following capabilities change as children get older:

- Self-evaluation: increases with age
- Need for support/independence: the need for support decreases and independence increases
- Understanding of rules: increases with age
- Communication: becomes more sophisticated with age
- Importance of parents/peer group: the importance of parents decreases, that of the peer group increases
- Need for movement: changes during development

In addition to empathy and the precise observation of a child's behaviour, knowledge of the various development stages helps the snow sports instructor to adopt the best possible approach to the child and to create a motivating and educational lesson.

The following illustration shows the age-related proportion between the height of the head and body length. The figures at the top indicate how many times the head height goes into the body length (according to Stratz, in Demeter 1981).



Every snow sports instructor notices when a positive learning atmosphere has developed with a learner or in a group. And he also notices when the atmosphere is not so good. But how can he positively influence the learning atmosphere? Are there principles that apply to all ages and types of learning groups?

Based on the teaching model, we can say that the learning atmosphere, just like the dialogue, evolves between the instructor and the learner. It is therefore all about the relationship between them both.

The quality of this relationship depends greatly on the following factors: that the individual's need for autonomy is recognised (me), the need to belong to the group is recognised (us), the individual experiences himself as competent (the content) and the environment has a positive influence on the learning process (the environment). In short, we talk about the "ABC of motivation". In this model, great importance is attached to a person's psychological needs. This applies both to the individual group members as well as the group leaders.

Every one of these factors can be influenced by the group leader. In the case of "me", there should be an appropriate balance between leading and co- or self-determination. In the case of "us", it is important to create a climate that values the individual and promotes equality amongst the members. Any disruption or conflict needs to be dealt with as an absolute priority. Experiencing competence in the "content" is mainly dependent on the choice of teaching content, its relevance and level of difficulty. In group instruction, it makes sense to individualise, if possible. The "environment" can only be influenced to a limited extent in snow sports. Little things such as taking a tea break when the weather is cold can help to perceive even bad weather as a safe and motivating learning environment. It has been proved that you learn better if you are warm enough, are in a positive mood and feel safe.

### Mindset

With reference to attitude and conviction (mindset), the snow sports instructor acts as a role model when it comes to the learning success of his pupils. There is a distinction between a dynamic and a rigid mindset when it comes to learning. Here are a few examples:

People with a dynamic mindset ...	People with a rigid mindset ...
... imagine that skill and success can be achieved by practising.	... imagine that skill and success are predetermined by nature.
... choose difficult tasks and can spend a long time on them.	... choose tasks that are relatively easy and that can be completed with little effort.
... are not greatly concerned whether they are regarded as talented or not.	... often think about whether they are being perceived as talented or not.

The mindset is very important for learning achievement and can also be changed. The instructor can guide the learners towards a dynamic mindset. For this purpose, he should ensure that he mainly gives feedback on personal effort and achievements. In this connection, we talk about task or process orientation. The feedback should be formulated in a positive way and strengthen desired behaviours.

### Learning atmosphere amongst teenagers (12 – 20 years)

In the early teens, there may be less urge to move and willingness to perform. The teenagers are often concerned with exploring their identities and they lack self-confidence. The group is very important to them. In the later teenage years, there may be a greater motivation for sports, personality characteristics become more and more individual. There may be large differences between boys and girls, both in relation to maturity and physical development. All these factors require a varied approach to teaching from the instructor according to the particular situation, taking the above-mentioned points into account.

## Instruction with various levels

### Allow participation

Groups consist of individuals. The leader is also an individual. As a role model and group organiser, he has a decisive influence on how the learners behave towards each other and on the learning atmosphere.

Participants want to be treated with respect, appreciation and tolerance and to be taken seriously. This requires that they have a say in how things are handled. In practice, this means that the learners can make decisions in the learning process themselves or can select from a certain number of possibilities presented to them. This can be achieved in a workshop-like atmosphere for example or during warm-up/cooling down.

### Learning atmosphere

Teenagers choose snow sports because they like them and these sports suit them. They make progress and notice that they have some ability. They feel that they are competent at something. So this already fulfils one of the basic psychological needs: the need for competence. If a person is to feel competent, there must be assessment criteria.

Here we differentiate between two perspectives:

#### *Competitive:*

A teenager can compare himself with other teenagers to see whether he is better or worse than the others. Here, the instructor only gives feedback to those who win. This means that only a small part of the group feels competent and only a small part of the group is really motivated.

#### *Task-oriented:*

The person can compare his current performance with earlier performance, for example. In this way, he can gauge whether he is making progress. If the instructor compares the teenagers' current performance with their earlier performance, they will all receive lasting motivation. When implementing a task-oriented climate, the instructor should always act as a role model – this means always wanting to improve and reflecting upon himself.

The way in which an instructor assesses his learners' performance encourages task-oriented or competitive behaviour.

To encourage a task-oriented learning climate, six target areas are important.

<b>Task –</b>	<ul style="list-style-type: none"> <li>– Allowing teenagers the chance to set goals themselves</li> <li>– Offering tasks according to ability with different tasks of varying degrees of difficulty</li> </ul>
<b>Authority –</b>	<ul style="list-style-type: none"> <li>– Assigning leadership roles to the teenagers and involving them in the decision processes</li> </ul>
<b>Recognition –</b>	<ul style="list-style-type: none"> <li>– Allowing mistakes and recognising effort</li> <li>– Giving feedback on individual progress</li> </ul>
<b>Grouping –</b>	<ul style="list-style-type: none"> <li>– Frequently forming small groups</li> <li>– Forming groups with differing performance levels</li> </ul>
<b>Evaluation –</b>	<ul style="list-style-type: none"> <li>– Evaluating the learning process and not just the result</li> <li>– Teenagers should observe/evaluate/advise each other</li> </ul>
<b>Time –</b>	<ul style="list-style-type: none"> <li>– Adapting the learning time to personal conditions/abilities</li> <li>– Organising lesson time efficiently</li> </ul>



### Swiss Workshops SKIING

#### Teen to Keen – Demo Team Ski



#### Workshop content

The Swiss Snow League is a very successful product of the Swiss Ski Schools. Over 200,000 children attend lessons every year. We have created a new product for our teenagers in the update of the Swiss Snow League in 2015, The Swiss Snow Academy. The aim is to keep the teenagers aged 12 to 17 years in the schools longer with an adjustment of the lesson structure.

With children, the way they learn changes according to their development stage. The role of the instructor also needs to adapt. This adjustment in the instructor's role is the main theme of our workshop.

The children are helped to make step-by-step progress in the Swiss Snow League with a clear curriculum. Different methods of communication are required according to the development stage. Here, the choice of the various intake channels is of great importance.

#### Practical examples:

##### Development stage 3 – 7 years

Children need specific reference points, markers for orientation. Clear benchmarks. Being able to ski down a slope alone.

##### Development stage 7 – 9 years

The children have a distinct competitive spirit. The instructor should create a good team and group atmosphere in which preferably everyone can achieve success.

##### Development stage 9 – 12 years

Children understand complex movement tasks and can imagine how to do them. The instructor should encourage the children to imagine the movements (visualisation).

The teenagers attending the Academy are mostly in the first stage of puberty. In this phase, the teenagers are exploring their identities and group awareness is strong. The instructor should deliberately take these points into consideration. The curriculum is much more flexible in the Swiss Snow Academy. The aim is to generate the feeling of “skiing with friends” where it is not the achievement of a certain level that matters so much as enjoying the group experience.

#### Practical examples:

The teenagers create a “best trick” video in the snow park. Here, the instructor discusses with the group who has to fulfil which task. He also supports the use of modern recording equipment in the lesson and so helps to create a fantastic video. The aim is not for every teenager to be able to do a “back-flip” at the end but if they all contribute their own individual strengths, they will all feel accepted in the group and so enjoy spending time at the ski school.

Our workshop participants should also be able to experience this during the Swiss Snow Demo Team workshop and we will be teaching them some exciting forms from the Swiss Snow Academy.

### Snow Sports Teaching Manuals Switzerland

Swiss Snowsports published a series of teaching manuals for the disciplines of skiing, snowboarding, telemarking and cross-country skiing from 2010 to 2013. This is a complete set of teaching notes that was prepared in collaboration with the training institutions in Switzerland.

The structure is as follows:

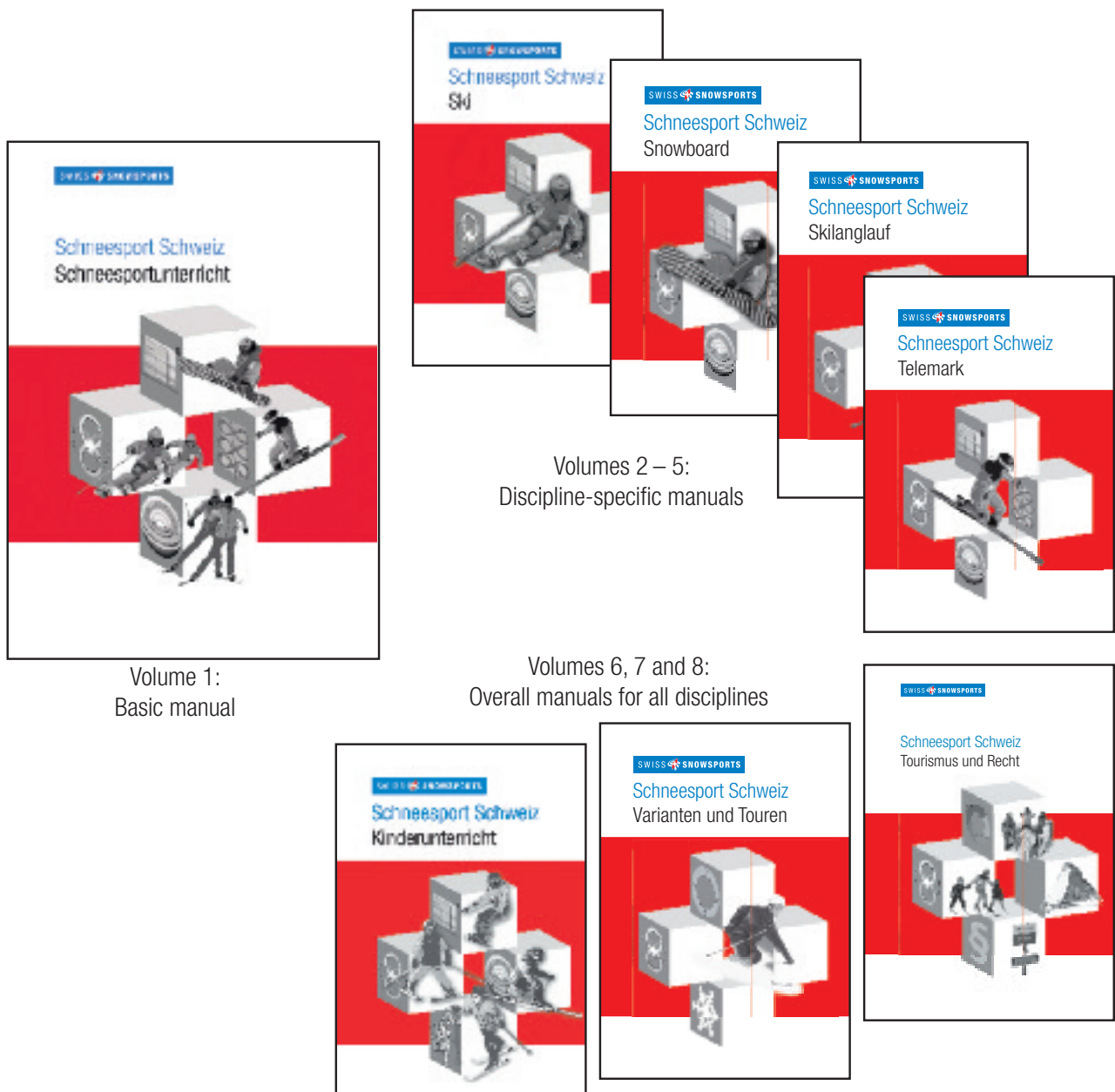
**Volume 1:** Basic skills and educational, methodological and motor skills concepts and models.

**Volumes 2 – 5:** Discipline-specific, technically oriented teaching manuals for the equipment used in skiing, snowboarding, cross-country skiing and telemarking.

**Volume 6:** Snow sports as a service. Event management, communications, nature and environment, economic and legal aspects.

**Volume 7:** The training documentation to assist instructors to carry out alternatives and tours with learners on the various pieces of equipment.

**Volume 8:** Children are the future of snow sports. This is why we have devoted a specific teaching manual to children's lessons containing the four pieces of equipment for skiing, snowboarding, cross-country skiing and telemark skiing.





# SWISS SNOWSPORTS DEMO TEAM



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With the Swiss Snow League and the Swiss Snow Academy, the Swiss Ski Schools have developed a training programme for learners that is unique in the world and provides tuition for all levels of ability, from beginners to experts.

As beginners, the little ones start in the Swiss Snow Kids' Village where Snowli shows them how to make their first moves on the snow and how to use the various types of equipment and handle the unfamiliar environment. Through the various levels of the Swiss Snow League, they learn the diversity of snow sports and develop into advanced snow sports enthusiasts.

When you have successfully completed the Swiss Snow League, you receive an access card granting admission to the Swiss Snow Academy. In the Swiss Snow Academy, the teenagers can gradually become experts on the slopes, in the snowpark and on ungroomed terrain. They learn and exchange ideas in the group with like-minded people.

Specially trained kids' instructors teach the children through play in the appropriate terrain. The focus is on safety, having fun and enjoying themselves with snow sports.

Only licensed ski schools which are members of the umbrella organisation, Swiss Snowsports, are allowed to offer the Swiss Snow League and Swiss Snow Academy programme. To get a licence, a school must employ professional instructors, provide a sound infrastructure and a secured training area. For further information, please see [www.snowsports.ch](http://www.snowsports.ch).

The ski or snowboard instructor adds the learner's progress and forms to the booklet – later the card – at the end of the course. This means that every learner can be immediately allocated to the right group when they next visit a ski school.





## Swiss Workshops SNOWBOARDING

### Challenging and encouraging learners according to their age Supporting children and inspiring teenagers

#### Goal:

Show examples of Swiss instruction with children and teenagers.

How lessons can be adapted to the relevant development stage to help pupils learn the movement in the best possible way and to foster an effective learning climate.

We want to provide our learners with instruction according to their needs and raise their intrinsic motivation. Both children and teenagers should leave each snowboarding lesson with a smile on their faces.

#### Development stage 5 – 7 years

Blue League Prince

Objective: Introduction, getting used to the snowboard

- Taking part in the lesson, experiencing a feeling of belonging
- Learning by networking

*Organisation: Circle with snowboard*

Task: “Pack my favourite animal in my rucksack”

Execution: Demonstrate, everyone copies and repeats constantly.

Variation: Blind (kinaesthetic, vestibular)

#### Development stage 7 – 9 years

Red League Prince

Objective: 180° on the slope

- Challenging task
- Learning by doing

*Organisation: Team of two*

Task: Game of Rock-Paper-Scissors. Winner does a 180°. Practise together until both can do it.

Variation: Winner sets a 180° task. When it has been done = 1 pt.

#### Development stage 9 – 12 years

Sample Level: Red League Star

Objective: Shifty/BS Boardslide

- Experience competence
- Learning by doing

*Organisation: Team of two*

Task: Each person says how far he can shift. Partner checks. Instructor gives tips.

Variation: Shifty to both sides



#### Development stage 9 – 12 years

Sample Level: Red League

Objective: Be a star in ollie/nollie 180°, slide, nose turn

- Support process objectives
- Learning by doing, learning by networking

*Organisation: Individual*

Task: Each learner chooses a trick and practises it with the aim of perfecting it. Instructor gives coaching input.

Variation: Children practise in small groups. Show each other the tricks they have learned.

#### Practical examples for teenagers

In lessons with teenagers, it is advisable to allow them a high level of self-determination of what the learning objective should be. Belonging to the group is more important than their own snowboarding ability level. The teenagers should benefit from learning from one another and with one another.

#### Academy Slope

Objective: New slope trick combinations

- Versatility through mutuality

*Organisation: Class task*

Task: Each learner shows his trick. They all demonstrate it. If possible in switch as well.

Variation: Put the various tricks together

#### Academy Park

Objective: Learn new straight air

- Learning by networking

## Swiss Workshops TELEMAR SKIING

### Introduction

In 2015, the Swiss Ski Schools developed a new product aimed specifically at teenagers: the Swiss Snow Academy. The objective is to offer a ski and snowboard product that focuses especially on the interests of children aged 12 to 17. During this phase of a child's development, which broadly corresponds to the puberty phase, the search for identity and belonging are important aspects of a child's life. Although there is no Telemark Skiing Academy at this stage, we believe that because telemark skiing is often perceived as being different, free-flowing and challenging, it can offer teens an outlet to express their identity and allow them to belong to a distinctive community. These interests are obviously not limited to teens only and are certainly not the only factors drawing people to the sport. One of the main reasons many adults choose to take up telemark skiing is an avowed need for a more challenging alternative to alpine skiing; one that allows them to leave the boundaries of traditional piste skiing and push the boundaries of their own balance. It is precisely because all these people seek a challenge and want less constraints in their snow sports activity that we have chosen to present a variety of telemark forms in this workshop — turns, tricks (combination forms) and jumps that are fun to learn and showcase the freedom of movement at the heart of the sport. Our references for this workshop are the J+S brochure "Lernklima" (learning environment) as well as the Swiss Snowsports manuals "Kinderunterricht" (kids instruction) and "Telemark".

Learning to telemark ski should not be a process during which a predefined sequence of specific exercises is rehearsed. Instead it should be a discovery and a challenge where the learner (teen or adult) is encouraged to experiment with the particularities of the free-heel situation. The role of the instructor is to create a learning environment in which each individual is allowed to play his part in the group while remaining available as a coach and as a mentor to help achieve individual and group objectives. In such an environment, teens should be allowed to set their own targets. A typical target might be to learn a specific form or trick, but might also be to create a new individual form or achieve something as a group (such as creating a film edit or executing a rapid fire over a jump for instance). From a technical point of view, the freedom of movement afforded by telemark skis and boots is counterbalanced by a set of references based on functionality such as the telemark position that the coach can utilise in his feedback. The coach should especially point out links between known movements and new ones. The known movements can either be known telemark movements or movements that are known from other sports. His input is based on the know-how and structure contained within the Telemark manual, which is discussed briefly below.

### Practical part:

The forms we will discover will cover a wide range of telemarking abilities. They are classified according to their difficulty on the one hand (novice, intermediate, expert) and according to their function on the other. In the latter, we define 5 groups of forms, or form families as we call them. These include locomotion/steps, sliding/braking, turning, jumping and combined forms. The forms we will experiment with are taken from these families and are suitable for different levels of ability. They have been chosen to give examples of forms that can be either a learning target or a starting point that will allow teens (and adults) to freely experiment and have fun while doing so. During the workshop, we want to demonstrate how to set engaging tasks and encourage learner participation as well as teamwork in order to resolve them. We hope participants will be able to see how these forms combined with an appropriate learning environment could provide a template for the development of telemark skiing with youths and young adults.

**1. Novice – telemark side-slipping to a telemark stop, waltz (tango), rotation turn.**

**2. Intermediate – switch, basic air, skating.**

**3. Expert – Engell turn, tailspin, box, moguls.**

#### Keywords:

Task-oriented teaching, challenging forms, learner participation, active coaching, creativity.

#### Conclusion:

Thanks to the experience gathered during this workshop, we hope you will be able to find new ways of conducting a telemark lesson. Film the best trick in the park or on the slope. Post it on our Facebook page.





## Swiss Workshops CROSS-COUNTRY SKIING

### Learning movements with pictures

The key aspect of the topic is how learning from snow sports instructors can be supported as efficiently as possible. As there are a large number of people who are good at learning visually when it comes to sports, it seems logical to support the learning of movements with pictures. In this way, we can get the learner to match his internal view of the movement with the external view and so improve his movement visualisation and receptivity. As instructors, we can compare the actual situation with the target situation and benefit from a possible slowing down of the movement in a slow motion view or in a still image. The pictures can generally be illustrations of the movements created with or without technical aids. The picture can either be physically present or an internal picture. The following possibilities are available:

- Various pieces of recording equipment (tablet, smartphone, video camera) and corresponding apps allow good pictures to be made which can be evaluated immediately.
- Photos (direct or still images from a video) or drawings can be made of the relevant key movements.
- A sports enthusiast can be modelled into a certain position with or without the help of a still image and this position should be memorised as a “kinaesthetic picture”.
- Tracks can be observed in the snow or drawn from imagination.
- The snow sports instructor can demonstrate a movement convincingly as an example. When doing this, he must particularly consider where to place the learners so that they can see as much of the relevant movement as possible for learning purposes (at the side/from the front/back).
- Individual forms or incorrect versions can be shown in a slightly exaggerated or amusing way.
- When making a presentation, attention can particularly be paid to noises (acoustic images). The learners can also look for noises that best support the right execution of the movement.
- Corrections should be given in the form of metaphors and pictures that can be internalised whenever possible. Instructors should also give the learners an opportunity to find their own metaphors/pictures on a theme. The better you can link an image, the more helpful it is!

If video recording is the chosen form, there is a need for preparation, recording and evaluation as well:

#### Preparation

- The equipment should be ready for use (battery, memory, understand how to work it, etc.).
- The snow sports instructor knows where he wants to film the learner from how far away and over what distance and why. The “why” determines the perspective (from the side, front).
- The learner is told what he should do before, during and after the recording. He also knows the purpose of the recording.



#### Recording

- Position and size of the snow sports enthusiast on the equipment?

#### Evaluation

- The evaluation can take place straightaway on the snow if possible.
- Ask the snow sports enthusiast how he visualises it.
- Look at the video together several times and express what you like about it, what you don't like about it so much (external view). Let the learner make his own comments. The snow sports instructor only gives his own feedback at the end. The cross-country app is very well suited as a target image.
- Every video analysis leads to an effective learning exercise which should be a metaphor or a picture.

#### Basics

- There can be several recording/evaluation cycles taking place one after the other.
- Video feedback should always be voluntary. If learners are not familiar with this form, they should be given particularly careful guidance. The video recordings should never be used to entertain the group with a particular individual's mistakes! If the recording is to be published on social media, all participants must give their consent.

It is important that the snow sports instructor thoroughly understands the technical aspects of the desired movement. This involves a very precise visualisation of the movement which makes it easy to observe, advise and evaluate the learner and represents a quality advantage in his lesson.

### Use of moving pictures

The quality of movements can be crucial when it comes to success and failure.

It is often difficult to observe an executed movement, to record the essential aspects and evaluate it and then provide the learner with effective feedback immediately afterwards. Learners have a picture in their heads beforehand – an internal view – of how they need to carry out their movements. Video recordings show them later how they actually executed the movements. This is the external view that can be played back and watched again and again for analysis.

Thanks to modern technology, it has become easier to record suitable, good-quality pictures. The production of these pictures is only part of the process however. The right evaluation and analysis of the pictures is even more important. The person who has to record and process the pictures must not be forgotten, either.

### Using target pictures

Observing target pictures can help learners to better visualise their movements. These target pictures can be used to visualise what a movement should look like or to compare actual execution against target execution. When comparing actual execution against target execution, you can make a note of differences in the movement straightaway.

### Reference to concepts

#### **Educational concept**

The learner is confronted with the self-image, the internal view and the external view. Watching moving pictures also takes the assimilation of visual information into account. Varying the recording channels is vital to be able to interpret information correctly. This simplifies the whole “assimilation-processing-executing” procedure.

#### **Methodological concept**

Moving pictures can be used as a methodological tool. In group exercises, the learners can record moving pictures of each other. This varies the organisational format and boosts group dynamics. Target pictures can also be used in connection with a holistic learning path.

#### **Sports motor skills concept**

By varying the recording angles, specific points can be analysed. For example, a recording filmed from the side can provide information about the forward and backward positions of the skier. The point to be analysed must be established before the recording to determine the ideal recording angle (body bend, phases of the turn, basic position, etc.).

### Use of modern recording and evaluation technology

Moving pictures can help us in many areas, the important thing is evaluate recordings as quickly as possible. Modern hardware and software solutions are efficient aids that make it easier to interpret a series of movements or the learner's awareness.



## Recording

### GoPro:

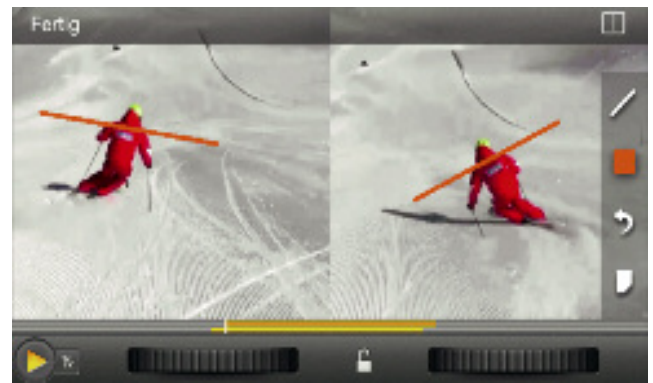
This wide-angle action camera makes it possible to record very good stable pictures. The recording angle can be varied with various “gadgets” such as a stick camera, helmet camera, etc. This makes it easier to capture targeted pictures.

Thanks to wireless and Bluetooth functions, the recording can be transferred directly to a tablet or smartphone and analysed.

## Recording, analysing, sharing

### Dartfish:

The Swiss company Dartfish offers effective and complete video analysis solutions that contain all the necessary functions to analyse technical performance.



The Dartfish express app is available from the app store for CHF 7.00.



## Closing words

### Andri Poo, Education SSSA

The Interski congress in Ushuaia will show us once again that there are various ways and methods of learning and teaching snow sports. The point of the congress is not to judge what is right and what is wrong. Nobody would dare to make such a judgement anyway.

It is all about exchanging views and discussing developments which can only take place in critical but constructive discussions and by questioning familiar patterns and sometimes by projecting visions.

Switzerland has remained faithful to its snow sports philosophy since the Interski Congress in Beitostolen (NOR) in 1999. The principles of learning and teaching snow sports apply to all forms of snow sports equipment. But we have also questioned our practices and developed further. The 2010 – 2013 series of teaching manuals, Volume 1 – 8, is a varied set of teaching aids based on a standard philosophy.

Teaching manuals and teaching aids form the basis of our training and instruction. The snow sports instructor needs to have the expertise to distinguish and decide what method and what teaching aid is appropriate in each situation.

This is why it is important to have teaching manuals that are easy to understand and practice-oriented and to work with simple, clear concepts and models. The Swiss snow sports training is structured according to these principles.

My very best wishes to you all for an interesting and informative congress.

## Bibliography

Müller, Stephan / Gadiant, Vali / Semadeni, Renato / Marugg, Jürg / Bonny, Michel / Berther, Aldo / Steiner, Jan (2010): Die Lehrmittelerie 2010 "Schneesport Schweiz". Belp: Swiss Snowsports Association

SSSA, Belp:  
Swiss Snow League  
Swiss Snow Academy

BASPO Magglingen:  
Lernen mit Bildern, Ausgabe 2014,  
Lernklima, Ausgabe 2014,  
Lernen im Sport, Bewegungslernen, Ausgabe 2012

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**Project manager** Andri Poo

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**Editorial staff** Swiss Snow Demo Team

**Partners and proof-readers** Members of Swiss Snow Education Pool

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